

EL SEGUNDO POWER REDEVELOPMENT PROJECT

Application For Certification (00-AFC-14)
Los Angeles County, California



Part 2
Public Health - Waste Management
Pages 159 - 220

CALIFORNIA
ENERGY
COMMISSION

**REVISED PRESIDING MEMBER'S
PROPOSED DECISION**

APRIL 2004
(P800-04-008)



PART 2

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PUBLIC HEALTH – Summary of Findings and Conditions

	POWER PLANT SITE	CUMULATIVE IMPACTS	LORS CONFORMANCE
Construction Health Risks	MITIGATION	None	YES
	<p>Large construction equipment potentially contributes to existing violations of state 24-hour PM₁₀ standards.</p> <p>MITIGATION:</p> <p><input checked="" type="checkbox"/> To minimize PM₁₀ emissions, the Project Owner shall require its construction contractors to minimize emissions from diesel powered earthmoving equipment. Condition AQ-C3.</p> <p>Grading and excavation activities potentially produce dust which can be transported off-site by wind.</p> <p>MITIGATION:</p> <p><input checked="" type="checkbox"/> To control airborne fugitive dust, the Project Owner shall water or apply chemical dust suppressants to disturbed areas, apply gravel or paving to traffic areas, and wash wheels of vehicles or large trucks leaving the site. Condition: AQ-C2, AQ-C4.</p> <p><i>References: FSA Air Quality, pp. 4.1-51.</i></p>		
Cancer Risks	Insignificant	None	YES
	<p>The conservative screening level health risk assessment for non-criteria air pollutants conducted under California Air Pollution Control Officer's Association guidelines finds a maximum exposure to the highest level of carcinogenic project pollutants for 70 years has a cancer risk of 0.94 in a million, below the 1 in a million benchmark for a potential health impact.</p> <p><i>Reference: AFC App. 5.16-1; FSA Public Health, p. 4.7-8.</i></p>		
Non-Cancer Risks	Insignificant	None	YES
	<p>The health risk assessment for non-criteria air pollutants conducted under California Air Pollution Control Officer's Association guidelines finds an exposure to the highest level of project pollutants produces a chronic hazard index of 0.02 and an acute hazard index of 0.01. Both are well below a threshold hazard index of 1.0, and thus not a significant health impact.</p> <p><i>References: AFC App. 5-16-11; FSA Public Health, p. 4.7-7.</i></p>		

PUBLIC HEALTH – GENERAL

Operating the proposed power plant would create combustion products and possibly expose the general public and workers to these pollutants as well as the toxic chemicals associated with other aspects of facility operations. The purpose of this public health analysis is to determine whether a significant health risk would result from public exposure to these chemicals and combustion by-products routinely emitted during project operations. The issue of possible worker exposure is addressed in the **WORKER SAFETY** section. Exposure to

electric and magnetic fields (EMF) is addressed in the **TRANSMISSION LINE SAFETY AND NUISANCE** section.

The exposure of primary concern in this section is to pollutants for which no air quality standards have been established. These are known as non-criteria pollutants, toxic air pollutants, or air toxins. Those for which ambient air quality standards have been established are known as criteria pollutants. The criteria pollutants are also identified in this section because of their potentially significant contribution to the total pollutant exposure in any given area. Furthermore, the same control technologies may be effective for controlling both types of pollutants when emitted from the same source.

Construction Health Risks

Construction-phase impacts are those from human exposure to (a) the windblown dust from site grading and other construction-related activities and (b) emissions from the heavy equipment and vehicles to be used for construction.

The procedures for minimizing such dust generation are addressed in the **AIR QUALITY** section while the requirements for soil remediation are specified in the **WASTE MANAGEMENT** section.

The Applicant has agreed to a Condition of Certification that addresses construction equipment emissions. The measures to mitigate these emissions have been specified in Conditions **AQ-C3**. Since chronic health impacts are usually not expected from equipment emissions within the relatively short construction periods, only acute health effects could be significant with respect to the toxic exhaust emissions of concern in this analysis. Mitigation measures specified in Condition **AQ-C3** are sufficient to reduce these potential acute health effects to insignificance.

Cancer Risks

According to present understanding, cancer from carcinogenic exposure results from biological effects at the molecular level. Such effects are currently assumed possible from every exposure to a carcinogen. Therefore, Energy Commission staff and other regulatory agencies generally consider the likelihood of cancer as more sensitive than the likelihood of non-cancer effects for assessing the environmental acceptability of a source of pollutants. This accounts for the prominence of theoretical cancer risk estimates in the environmental risk assessment process.

For any source of specific concern, the potential risk of cancer is obtained by multiplying the exposure estimate by the potency factors for the individual carcinogens involved. Health experts generally consider a potential cancer risk of one in a million as the *de minimis* level, which is the level below which the related exposure is negligible (meaning that project operation is not expected to result in any increase in cancer). Above this level, further

mitigation could be recommended after consideration of issues related to the limitations of the risk assessment process.

ESPR conducted a screening level health risk assessment for the project-related non-criteria pollutants of potential significance. This assessment was conducted according to procedures specified in the 1993 California Air Pollution Control Officer's Association (CAPCOA) guidelines for sources of this type. The screening level assessment uses conservative assumptions to avoid underestimating actual risks. The cancer risk estimates from this analytical approach represent only the upper bound on this risk. The actual risk would likely be much lower. Thus, when a screening level analysis is less than 1 in a million, the potential cancer risk is insignificant and additional, more refined analysis is not warranted.

A risk estimate of 0.94 in a million was calculated for all the project's carcinogens from this screening level analysis. A more refined analysis would likely yield a lower estimate. This screening level estimate suggests that the project's cancer risk would be negligible and is significantly less than the 10 in a million which staff considers as a trigger for recommending mitigation above the applied toxic-best available control technology or T-BACT. This means that the proposed emission controls measures are adequate for the project's operations-related toxic emissions of primary concern in this analysis. This risk estimate is also below both the 1 in a million that SCAQMD considers significant for this type of project and the 10 in a million requiring public notification. (AFC 5.16-1; FSA Public Health, p. 4.7-7.)

Non-cancer Risk

The ESPR health risk assessment also reviewed non-criteria pollutants with respect to non-cancer effects. A chronic hazard index of 0.02 was calculated for the project's non-carcinogenic pollutants considered together. Their acute hazard index was calculated to be 0.01. These indices are well below the levels of potential health significance (hazard index 1.0), indicating that no significant health impacts would likely be associated with the project's non-criteria pollutants. (AFC 5.16-44; FSA Public Health, p. 4.7-7.)

Cumulative Impacts

No significant sources of the toxic pollutants of concern in this analysis are proposed within six miles of project. This means that the project's emissions and existing background concentrations would make up any exposures of a cumulative nature in the immediate project area.

Finding

With the implementation of the Conditions of Certification in other sections of this Decision, the project conforms with applicable laws related to public health, and all potential adverse impacts to public health will be mitigated to insignificance and no Conditions of Certification are issued in this section.

LAWS, ORDINANCES, REGULATIONS & STANDARDS

PUBLIC HEALTH

APPLICABLE LAW	DESCRIPTION
<i>FEDERAL</i>	
Clean Air Act, §109 and 301(a). 42 USC §7401 et seq. and 40 CFR 50	Established air quality standards to protect the public health from exposure to air pollutants.
Clean Air Act §112(g), 42 USC §7412, and 40 CCR 63	Requires review of new or modified sources prior to promulgation of the standard and establishes emissions standards for HAP from specific source types including gas turbines. ESPR will not be a major source of HAP and hence is not subject to these provisions at this time.
<i>STATE</i>	
Health and Safety Code §25249.5 et seq. (Safe Drinking Water and Toxic Enforcement Act — Proposition 65)	Requires posting of facilities that have chemicals known to cause cancer and public notification of significant risks.
Health and Safety Code §39650-39625	Provides for a special statewide program directed by the ARB to evaluate the risks associated with emissions of chemicals designated as TAC and to develop and mandate methods to control these emissions.
Health and Safety Code §44300 et seq. (Air Toxics “Hot Spots” Information and Assessment Act – AB2588)	Requires facilities that emit listed criteria or toxic pollutants to submit emissions inventories to the local air district. Such facilities may also be required to conduct a health risk assessment.
<i>LOCAL</i>	

SOCIOECONOMICS – Summary of Findings and Conditions

	POWER PLANT SITE	CUMULATIVE IMPACTS	LORS COMPLIANCE
Employment	None	None	YES
	<p><u>Construction:</u> The construction workforce, peaking at 422 workers and averaging between 200 to 300 workers, is a de minimus percentage of the construction workforce in Los Angeles County; thereby, creating no employment or population impacts. The project will benefit local employment directly.</p> <p><u>Operation:</u> The permanent operation workforce for the existing power plant complex is 51; only one or two new employees will be required to operate the new project. Even if the new employees come from outside the study area, their small number causes no employment or population impact.</p> <p><i>References: AFC p. 5.10-2-4, 16-21; FSA Socioeconomics p. 4.8-5.</i></p>		
Housing	None	None	YES
	<p><u>Construction:</u> Most of the construction workforce, peaking at 422 workers during the 20-month construction period, is expected to commute to the project. There are sufficient housing resources for any non-commuting workers including residential housing, hotels, and motels.</p> <p><u>Operation:</u> The operation workforce, consisting mostly of existing employees, is expected to commute to the project. There are sufficient housing resources for any new permanent employees to relocate to the project without impacting housing in the study area.</p> <p><i>References: AFC p. 5.10-4, 20-22; FSA Socioeconomics p. 4.8-5.</i></p>		
Schools	None	None	YES
	<p><u>Construction:</u> Most of the construction workforce is expected to commute to the project. There would be no impact to the schools in the El Segundo Unified School District.</p> <p><u>Operation:</u> One to two new families of new fulltime operation employees may move into the project area and enter local schools without causing an impact to existing schools. A one-time school impact fee will be assessed on the project.</p> <p><i>References: AFC p. 5.10-5, 23; FSA Socioeconomics p. 4.8-5.</i></p>		

Utility/Public Services	CONDITION	None	YES
	<p><u>Construction</u>: Construction is not expected to create an additional demand for utilities, including landfill disposal or wastewater treatment.</p> <p><u>Operation</u>: The operation of the power plant is not expected to create an additional demand for public services.</p> <p>CONDITION:</p> <p><input checked="" type="checkbox"/> The Project Owner shall pay one-time development fees to the City of El Segundo for fire, police and library services. Condition: SOCIO-1</p> <p><i>References: AFC p. 5.10-6, 7, 22; FSA Socioeconomics p. 4.8-11,12.</i></p>		
Economy/ Government Finance	None	None	YES
	<p><u>Construction</u>: The total construction payroll for the power plant is estimated to be \$60 to \$65 million. The cost for locally purchased materials and supplies is estimated to be approximately \$2 - 3 million.</p> <p><u>Operation</u>: Operation payroll is approximately \$1.6 million per year. Capital cost is \$350 - 400 million. The project is expected to provide \$2.5 million in local tax revenues.</p> <p><i>Reference: AFC p. 5.10-7; FSA Socioeconomics pp. 4.8-6, 7.</i></p>		
Environmental Justice	None	None	YES
	<p><u>Minority/Low Income Population</u>: Within a six-mile study area, revised census data shows the minority population exceeds 60 percent, which is higher than the State average (53.3) but less than the Los Angeles County average (69.0). Low-income (poverty threshold) population is approximately 10.1 percent.</p> <p><u>Disproportionate Impacts</u>: There are no significant project-related unmitigated adverse environmental or public health impacts. Potential air quality, public health, and hazardous materials handling impacts to the public have been mitigated to less than significant through the Conditions of Certification in this Decision. The location of the project at an existing power plant site causes no significant land use impact. There are no significant cumulative project impacts, nor <u>significant</u> adverse impacts that fall disproportionately upon minority or low-income populations.</p> <p><i>Reference: AFC p. 5.10-7, 23, 24; FSA Socioeconomics p. 4.8-6-11.</i></p>		

SOCIOECONOMICS – GENERAL

The socioeconomic impact analysis evaluates the potential direct and cumulative project-induced impacts on community services and/or infrastructure including schools, medical and protective services and related community issues such as environmental justice.

Los Angeles County has a very large population and has grown for many years. According to census data, population grew by 1.4 million between 1980 and 1990, and at a slower rate, 600,000 from 1990 to 2000. According to the Southern California Association of Governments forecasts (SCAG), the County population will grow by more than a million residents in each of the next two decades. As relatively central communities that were effectively built out by 1980, population growth rates in El Segundo and Manhattan Beach have been more gradual than that of the County.

Leading industrial categories in Los Angeles County are services, with 33 percent of all jobs, trade with 22 percent of all jobs, manufacturing with 15 percent, and government with 14.5 percent. While construction, at 3.2 percent, does not represent a major proportion, 133,000 workers, including approximately 10,000 workers in heavy construction, and 90,000 in special trades, represents a large substantial labor force for project construction. According to SCAG estimates, Los Angeles County employment grew by 7.5 percent from 1994 to 2000.

While El Segundo only has about 10,000 employed residents, there are approximately 100,000 persons employed in the City. The manufacturing sector responsible for about 70 percent of the jobs. Aerospace and technology firms predominate, but the large Chevron refinery is the most expansive land use in the City. Airport related offices, hotels, and services are also a significant economic factor in El Segundo.

The existing El Segundo Power Plant complex employs 51 people. Businesses and industrial uses near the project site include the Chevron refinery, Los Angeles Department of Water and Power's Scattergood plant, the Hyperion Wastewater Treatment facility, and a service station at Vista Del Mar and 45th.

Employment

Construction will occur over a 20-month period. The peak construction labor requirement for the power plant and associated pipeline is estimated at 422 workers, and is expected to occur during the 11th and 12th months of construction. The number of workers is expected to exceed 300 workers for eight months and exceed 200 workers for a 13-month period, months four through 16 of the process. The primary task for the first 4 to 6 months would be the demolition of elements of the existing plant that will be replaced.

Los Angeles County has a large construction labor force with an ongoing demand for their services, including major public works and private projects. As a result, there is a supply of workers in the trades required to construct the plant. Employment of up to 422 construction workers at the site would not result in any problems with labor availability for other construction projects.

The permanent employment associated with the proposed project (53 workers) would include two additional employees. This will not have a significant impact on the Los Angeles County labor force. (AFC p 5.10-16; FSA Socioeconomics p. 4.8-5.)

Housing

As of January 2000, Los Angeles County had 3,272,000 housing units, including 180,000 vacant units, a 5.5 percent vacancy factor. El Segundo had a housing stock of 7,362 units, and a 5.8 percent vacancy rate. Of the El Segundo housing stock, 47 percent were single-family units, 12 percent were in buildings with two-four units, and 41 percent were in buildings with five or more units. Manhattan Beach had 15,293 units in January 2000, including 74 percent single-family units. Vacancy rate was 4.8 percent. Neither El Segundo nor Manhattan Beach has a significant supply of mobile homes. According to 1990 estimates, El Segundo had an inventory of 1,400 hotel and motel rooms (El Segundo General Plan, page 2-10).

As stated previously, construction of the proposed project is not expected to result in workers moving to the area for construction or permanent jobs. However, if for some reason a few workers did temporarily relocate, there was a housing vacancy rate of 4 to 6 percent in El Segundo, Hawthorne, and other nearby cities in 2000. Los Angeles County is also a dynamic community with constant movement and relocation of population, so there is a turnover of housing supply on a constant basis. Construction of the project will not cause any significant impact on housing.

Of the employees needed for operation of the project, it is estimated that virtually all of the plant's workers would commute from within the study area. Any employees hired from outside the study area would likely relocate to within a one-hour commuting distance of the project site. Such relocation would not create a significant impact on available housing within the study area. (AFC p. 5.10-4, 20-22; FSA Socioeconomics pp. 4.8-7, 8.)

Schools

The El Segundo Unified School District provides K-12 education for the community. The closest school is El Segundo High School, at 640 Main Street, approximately one-mile northeast of the project site. Elementary and middle schools are about 1.5 miles from the site. Manhattan Beach has a separate school district, as do many of the surrounding communities.

Temporary workers are not expected to move to and/or bring families to El Segundo or nearby communities during the construction period. Thus, there is not expected to be any impact on the need for school facilities. One-time school impact fees may be assessed once plans are submitted to the El Segundo ~~Unified School District~~ Building Department. (AFC p. 5.10-27; FSA Socioeconomics p. 4.8-5)

Utility/Public Services

Southern California Gas provides natural gas to the project site, and the new plant will replace an existing plant. No expansion of the natural gas service to the site will be

necessary. Southern California Edison provides electricity to the site and community. The primary local telephone provider is SBC.

The City of El Segundo provides water and sewer service within the City limits, and will provide potable water to the project. Sanitary sewer discharge from the existing plant is to the sewer system operated by the City of Manhattan Beach. Reclaimed water will be acquired from the West Basin Municipal Water District, and the Applicant will continue to use cooling water from Santa Monica Bay through the existing intake structure servicing the site.

Fire protection is provided by the El Segundo Fire Department, which has 54 firefighters and paramedics operating from two fire stations. The closest station, # 1, normally has 10 staff on duty per shift. Response time to the site is approximately three to five minutes. With a major refinery in town, the El Segundo Fire Department has an environmental safety division that coordinates with local industries to develop emergency response plans. Manhattan Beach Fire Department is also available via mutual assistance.

Police protection is provided by the El Segundo Police Department, with 69 authorized sworn officers plus support staff. On-duty patrol staff ranges from three to eight officers. Response time to the project site is under four minutes. The Manhattan Beach Police Department is of comparable size and will provide mutual aid if required.

The closest hospital with full emergency services is the Robert F. Kennedy Medical Center in Hawthorne, approximately four miles northeast of the site. There are industrial medical clinics in El Segundo and several other medical centers five to 10 miles from the project site.

CONDITION:

- ☒ The Project Owner shall pay one-time development fees to the City of El Segundo for fire, police, school, and library services. Condition: **SOCIO-1**.

Economy/Government Finance

The existing El Segundo Generating Station is a significant fiscal factor for the City of El Segundo, paying both property taxes and natural gas franchise fees that are substantial revenue sources for the City. According to estimated value, the current plant pays approximately \$1 million annually in property taxes, of which the largest amount (48 percent) goes to schools and colleges, 12 percent goes to the County general fund and approximately nine percent, or \$90,000 would go to the City of El Segundo. Annual natural gas franchise or usage fees are also paid to the City.

Construction of the proposed project will generate one-time sales tax receipts. Because the majority of supplies and equipment will be purchased outside of the City of El Segundo and Los Angeles and Orange Counties, limited local sales tax will be generated by the project. According to the Applicant's estimates, about \$2 to 3 million worth of material and equipment would be purchased locally. Construction payroll is estimated to be about \$60 to 65 million. On-going operational payroll is projected at approximately \$1.6 million (AFC, page 5.10-21). Thus, the project will result in both one-time and ongoing economic benefits to local governments and businesses.

The assessed value of the redeveloped El Segundo Generating Station is estimated to be \$350-400 million. Based on the expectation that approximately \$250 million of improvements will represent net gain in assessable value (subtracting old elements that will be removed), the City of El Segundo will receive \$227,000 annually in additional property tax revenue. The County General Fund would receive \$300,000, and the Schools will receive \$1.2 million additional. Franchise fees to El Segundo for natural gas would increase by some unknown amount, depending on the rate and the proportion of time the new units are on-line, which is expected to be higher than for the current units.

Under a law recently signed by the Governor, AB 81, the responsibility for property tax assessment of the ESPR property and other large power plant properties will shift from the County Assessor to the State Board of Equalization by making them "state assessed properties." This will require annual reassessment at fair market value, and provide that property tax collected be distributed exclusively to the taxing jurisdictions within the Tax Rate Area in which the facility is located. (AFC p. 5.10-7; FSA Socioeconomics p. 4.8-6, 7.)

Property Values

Intervenors Murphy/Perkins and the City of Manhattan Beach contend that the project will adversely affect local property values. Intervenor Michelle Murphy requested two Commission staff witnesses to testify on Socioeconomics and asked on cross-examination whether there is a correlation between property values and the degree of pollution in that neighborhood. Staff testified that studies show that one factor, such as air pollution alone, does not solely affect property values. Rather, property values are affected by cumulative effect of such issues as proximity to schools, and neighborhood amenities, as well as air quality. (RT 2/20/03 24:4-30:6.)

The Commission finds that this Decision fully mitigates any potential impacts of the project, which combined with Staff's testimony, leads us to conclude that the project will not have an adverse effect on local property values. Thus, no mitigation in the form of compensation, or otherwise, is appropriate for this project.

Environmental Justice

Presidential Executive Order 12898, entitled "Federal Actions to address Environmental Justice (EJ) in Minority Populations and Low-Income Populations," focuses federal attention on the environment and human health conditions of minority communities and calls on agencies to achieve environmental justice as part of this mission. The order requires the US Environmental Protection Agency (EPA) and all other federal agencies (as well as state agencies receiving federal funds) to develop strategies to address this issue. The agencies are required to identify and address any disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and/or low-income populations.

For all siting cases, the Energy Commission follows the U.S. Environmental Protection Agency's guidance in conducting a two-step environmental justice analysis. The analysis assesses:

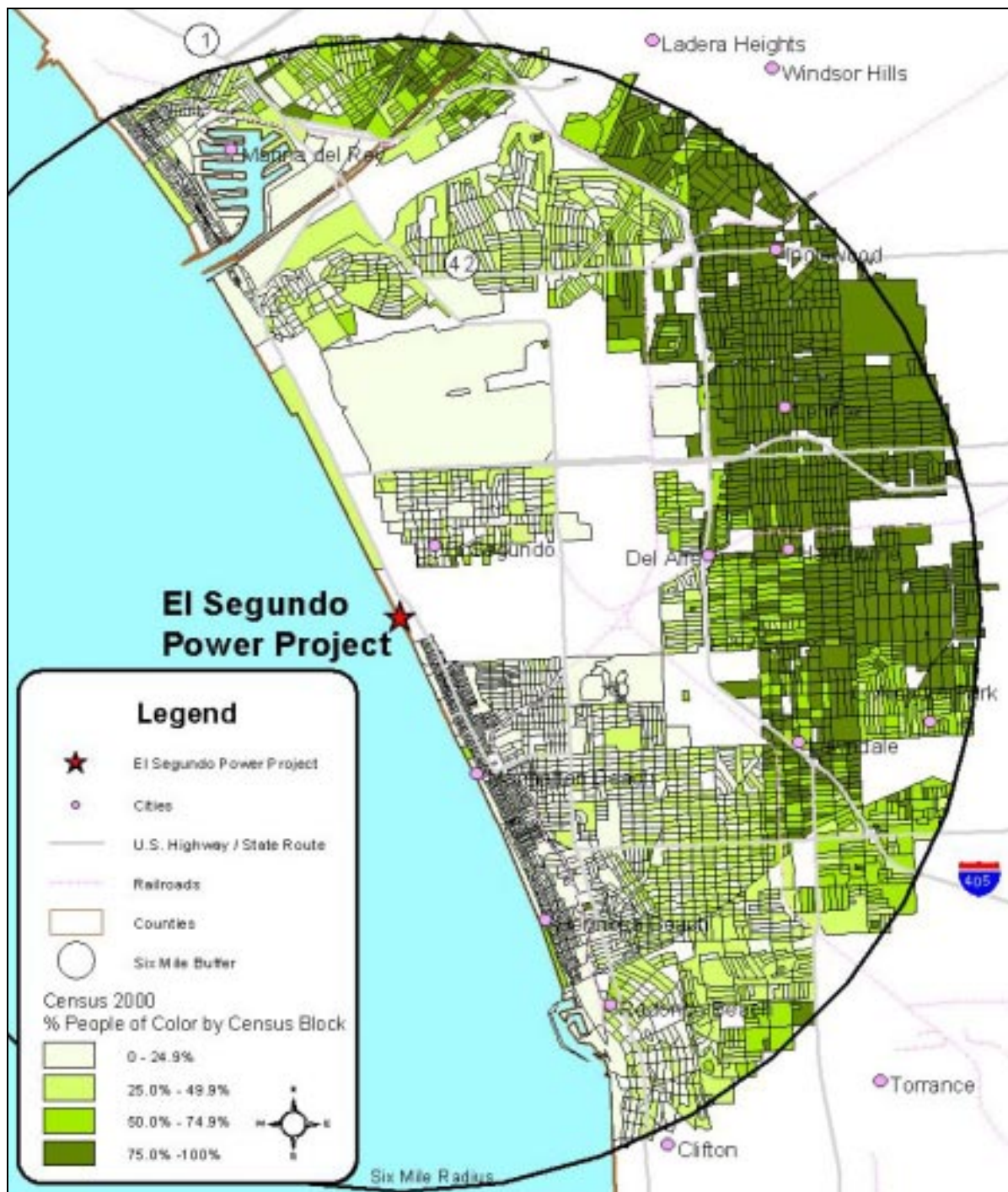
- Whether the population in the area potentially affected by the proposed project is more than 50 percent minority and/or low-income, or has a minority or low-income population percentage that is meaningfully greater than the percent of minority or low income in the general population, or other appropriate unit of geographic analysis; and
- Whether significant environmental impacts are likely to fall disproportionately on the minority and/or low-income population.

Commission staff determined the affected area for this environmental justice analysis to be the area within a six-mile radius of the proposed project site. This area corresponds to the area analyzed for potential air quality and public health impacts.

Updated census ~~tract~~ block data were reviewed to assess the demographic profile within that six-mile radius of the proposed power plant site. On the basis of this data, the area within that six-mile radius is 60.9 percent minority population.

Federal guidance does not give a percentage of population threshold to determine when a low-income population becomes recognized for an environmental justice analysis. The Energy Commission uses the same greater than 50 percent threshold that is used for minority populations, as well as a "meaningfully greater" percentage population. Staff found only 10.1 percent of the population below the poverty level in local census tracts.

However, even though low-income and minority populations exist in the area around the proposed project, this Decision finds there are no identified significant, project-related, unmitigated adverse human health or environmental effects. Therefore, no significant adverse impacts to minority or low-income populations are expected to occur. The **AIR QUALITY, PUBLIC HEALTH** and **HAZARDOUS MATERIALS** sections of this Decision indicate that potential risks to all segments the public can be mitigated to a less-than-significant level through use of minimized hazardous materials, engineering controls, operational controls, administrative controls, and emergency response planning. Additionally, no significant adverse cumulative impacts are associated with the proposed power plant project. Therefore, no significant adverse cumulative impacts to minority or low-income populations are expected. (AFC p. 5.10-7, 23, 24; FSA Socioeconomics pp. 4.8-6-11.)



Cumulative Impacts

Los Angeles County is an area that has a relatively high level of development of public and private projects, including highway projects, new commercial development, and new residential development. There are on-going projects that would occur concurrently with the El Segundo Power Redevelopment Project. The only potential impact from a cumulative socioeconomic point of view could be a possible shortage of workers in some trades, thus creating an influx of new population. This new population could have impacts on housing and schools. However, because of the size of the County and the construction labor force, no cumulative impacts are anticipated.

Similarly, there were no cumulative impacts identified from operation of the proposed project, as most permanent project personnel will be hired from the area and would not likely relocate. Consequently, no significant cumulative impacts on the socioeconomics of the study area are anticipated to occur due to operation. (AFC p. 5.10-24; FSA Socioeconomics p. 4.8-12.)

Findings

The El Segundo Power Redevelopment Project would not cause a significant adverse direct or cumulative impact on housing, employment, schools, public services or utilities. The project would have a temporary benefit to the City of El Segundo and adjacent areas in terms of an increase in local jobs and commercial activity during the construction of the facility. The construction payroll and project expenditures would also have a positive effect on local and County economies. The estimated benefits from the project include increases in the affected area's property and sales taxes, employment, and sales of services, manufactured goods, and equipment. Overall, the project will have a positive socioeconomic impact on the El Segundo area.

The project conforms to applicable laws related to socioeconomic matters and all potential socioeconomic impacts will be insignificant.

CONDITIONS OF CERTIFICATION

SOCIO-1 ~~The project owner shall pay the City of El Segundo any applicable one-time public service mitigation fee(s).~~ Prior to the start of commercial operations, the project owner shall pay the City of El Segundo the following one-time fees:

- Police service mitigation fee of \$0.11 per gross square foot of building area;
- Fire service mitigation fee of \$0.14 per gross square foot of building area;
- Library service mitigation fee of \$0.03 per gross square foot of building area;
- Traffic mitigation fee for new development, in an amount to be determined by the City of El Segundo Public Works Director upon receipt of a Traffic Mitigation Fee Determination Form.

The gross square foot of building area and the amount of the one-time fees shall be determined by the City of El Segundo at the time the project owner submits the site plans.

Verification: Prior to the start of commercial operation, the project owner shall submit verification to the CPM that payment of any required public service mitigation fees have been submitted to the City of El Segundo. The project owner shall provide proof of payment of the Traffic Mitigation Fee in the next Monthly Compliance Report following payment.

NOTE: The Applicant and the City of El Segundo have reached a side agreement for the Applicant to perform the following analysis and request the Commission's inclusion of the agreement as a Condition of Certification.

SOCIO-2 Prior to any ground disturbance activities, the project owner shall prepare a fiscal impact analysis for the project that includes analysis of the actual revenues and costs associated with the project. The revenue analysis shall include an analysis of the total property tax, franchise tax, utility user tax, sales and use tax, business license fees, building permit fees, and other revenues generated by the facility as identified in the City of El Segundo's Fiscal Impact Model. The cost analysis shall include a discussion of the cost to City services (i.e., police, fire, public works) for ongoing service to the project. The fiscal impact analysis shall compare the revenue and costs over a minimum period of five years following the start of commercial operations.

Verification: At least 30 days prior to any ground disturbance activities, the project owner shall transmit the analysis to the City of El Segundo for review and comment and to the Energy Commission Compliance Project Manager (CPM) for review and approval.

LAWS, ORDINANCES, REGULATIONS & STANDARDS

SOCIOECONOMICS

APPLICABLE LAW	DESCRIPTION
<i>FEDERAL</i>	
Executive Order 12898	Executive Order 12898, "Federal Actions to address Environmental Justice (EJ) in Minority Populations and Low-Income Populations," focuses federal attention on the environment and human health conditions of minority communities and calls on agencies to achieve environmental justice as part of this mission. The Order requires the US Environmental Protection Agency (EPA) and all other federal agencies (as well as state agencies receiving federal funds) to develop strategies to address this issue. The agencies are required to identify and address any disproportionately high and adverse human health or environmental effects of their programs, policies, and activities on minority and/or low-income populations.
<i>STATE</i>	
California Government Code sec. 65995-65997	Includes provisions for levies against development projects in school districts. The local Unified School District will implement school impact fees based on new building square footage.
<i>LOCAL</i>	
City of El Segundo	Development impact fees for fire, police, and library services, based upon gross square footage of the development project.

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TRAFFIC & TRANSPORTATION – Summary of Findings and Conditions

	POWER PLANT SITE	CUMULATIVE IMPACTS	LORS COMPLIANCE
Congestion	MITIGATION	MITIGATION	YES
<p><u>Construction:</u> Commuting construction workers, estimated to peak at 422 workers, but average 200 - 300 over the 20-month construction period, will add to existing congestion on some local streets. Construction workers will park at dispersed off-site lots and be bussed to the site. Truck deliveries of construction equipment and supplies, mostly during non-commute hours and also from dispersed staging areas, is estimated to peak at 29 deliveries per day during the peak months, which is within the design limits of the Interstate freeways and local streets.</p> <p>Construction of three in-street pipelines could create temporary traffic congestion, which can be mitigated by traffic control measures. A potential cumulative traffic impact could arise from the simultaneous construction of the project and other projects in the vicinity.</p> <p>MITIGATION:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The Project Owner shall develop an off-site construction worker parking and materials staging plan. Condition: TRANS-4 <input checked="" type="checkbox"/> The Project Owner's shall prepare a Traffic Control Plan to assure that added peak commute traffic and in-street pipeline construction does not create unacceptable congestion impacts. To achieve this goal, the Project Owner will stagger arrival and departure times, minimize lane closures and use traffic control, and assure access to residences and businesses during pipeline construction. Condition: TRANS-5. <p><u>Operation:</u> Since the project replaces an existing power plant, the Project Owner expects no significant added truck deliveries for materials associated with this project's operation. Two new permanent operating employees will be added for the project. Neither operation deliveries nor commuting will impact traffic on local streets or Interstate freeways.</p> <p><i>References: AFC p. 5.11-3-6; 10-13, 15; FSA Traffic & Transportation pp. 4.9-11-16.</i></p>			

	POWER PLANT SITE	CUMULATIVE IMPACTS	LORS COMPLIANCE
Safety	MITIGATION	None	YES
	<p><u>Construction:</u> Construction will require the use of large vehicles, occasionally including oversize or overweight trucks. Additionally, there will be deliveries to both the power plant site and the pipeline sites of hazardous construction substances, such as gasoline, diesel fuel, oils, solvents, cleaners, paints, etc.</p> <p>MITIGATION:</p> <ul style="list-style-type: none"> ☑ Caltrans permits control vehicle size and weight. Condition: TRANS-1. ☑ California Highway Patrol and Caltrans permits control transport of hazardous substances. Condition: TRANS-3. ☑ Encroachment permits shall be obtained and construction-impacted roadways will be restored to their pre-construction condition. Condition: TRANS-2 and TRANS-7. <p><u>Operation:</u> There will be no significant added truck deliveries to the power plant site of hazardous materials, such as sulfuric acid, sodium hypochlorite, sodium hydroxide, gasoline, etc. Deliveries of hazardous materials will be over pre-arranged routes selected for their safety features, including the absence of obstructions and curves, and minimal railroad traffic. Aqueous ammonia will be delivered by pipeline; if the pipeline is temporarily out of service, deliveries will be made by truck.</p> <p>MITIGATION:</p> <ul style="list-style-type: none"> ☑ Hazardous materials haulers must be specially licensed by the California Highway Patrol. Condition: TRANS-3; See also HAZARDOUS MATERIALS section. <p>References: AFC p. 5.11-11-15; FSA Traffic & Transportation, pp. 4.9-9-16.</p>		
Parking	MITIGATION	None	YES
	<p><u>Construction:</u> Off-site parking is necessary for construction workers due to the limited space at the power plant site.</p> <p>MITIGATION:</p> <ul style="list-style-type: none"> ☑ The Project Owner shall develop an off-site construction worker parking and materials staging plan. Condition: TRANS-4 <p><u>Operation:</u> Adequate on-site parking is available for power plant personnel.</p> <p>Reference: AFC p. 5.11-11-14; FSA Traffic & Transportation, pp. 4.9-12.</p>		

TRAFFIC – GENERAL

The construction of the power plant causes additional trips by construction workers and delivery trucks to and from the site, increasing daily traffic volumes on the freeways and local

streets. The potential impact of the project is measured by the LOS (Level of Service) of the surrounding roadway segment based upon average daily traffic volume. LOS is measured in a range from LOS A to LOS F. A LOS of A refers to little or no congestion, whereas LOS F is heavy congestion with significant delays and significantly reduced travel speeds. (AFC p. 5.11-3; FSA Traffic & Transportation, p. 4.9-9.)

Congestion

Construction:

Since the project site, itself, cannot accommodate construction workers and the laydown of materials and equipment, the Applicant proposes multiple off-site parking and laydown areas in the surrounding area. Construction workers will be bussed from parking lots located at the Fed Ex site, the Los Angeles International Airport Pershing site, and County/State Beaches located north of the project. The following locations may be used as laydown staging areas:

- Kramer – This area (site 1) may be used for storage of equipment to be installed in ESPR, and is located approximately 2.2 miles east of the ESGS.
- FedEx – This area (site 2) may be used for storage of equipment to be installed in ESPR. It is located approximately 2.5 miles northeast of the ESGS.
- LAX Pershing – This area (site 3) may be used for storage of equipment to be installed in ESPR. It is located approximately 1.8 miles north of the ESGS.
- Chevron Marine Terminal – This area (site 8) may be used for storage of equipment to be installed in ESPR and is immediately north of the ESGS.

Commuting Workers

The 20-month construction phase of the project will require a peak workforce of approximately 422 workers per day. An estimate of the number of daily trips by construction workers is based upon a worst-case assumption that all workers will drive alone (i.e., no carpooling assumed, no public transit use) to/from the off-site parking lots during peak hours, which would result in 844 employee commute trips. The average workforce is expected to be between 200 - 300 workers.

The preferred commuting route will depend on the residence location of construction workers. Based upon the overall population distribution in the greater Los Angeles area, the Applicant assumed that 50% of the project construction workforce will be commuting from the east, 20% from north of LAX airport, 25% from areas to the south, and 5% from local areas (i.e., El Segundo).

The those intersections or roadways which have either a pre-existing LOS F, or which become LOS F during either the morning or evening commute hours with the addition of project traffic are shown above. The intersections of Sepulveda Boulevard at El Segundo Boulevard and Vista Del Mar at Rosecrans Avenue drop from LOS E to LOS F during the

morning and evening peak traffic, respectively, under both the LAX/Pershing and County/State Beach parking location scenarios with the addition of project-related trips.



No other study intersections or roadway segments are significantly impacted (i.e. cause a location to be worse than relevant standard) by the project under existing plus project conditions with each parking site scenario. To minimize the effect of traffic on the local roadways, the Applicant proposes to develop a traffic control plan (TCP).

When operational, the project is expected to add two additional full-time employees above the current operations employee levels. This increase in staffing represents an insignificant increase in traffic levels as a result of the on-going operation the power plant. (AFC p. 3-6; 10-13; FSA Traffic & Transportation p. 4.9-10, 11, 15.)

Truck Traffic

During construction, truck deliveries of heavy equipment, construction materials (such as concrete, wire, pipe, cable, fuel, etc.), consumables and miscellaneous items are expected to occur between 6:00 AM and 6:00 PM, but generally not during peak commute hours. At the peak month of construction (month 6), 29 delivery trucks per day are expected to access the

project site. This averages approximately 3 trips per hour. The addition of 3 trucks will represent a negligible increase in traffic volumes along proposed routes of travel. The proposed designated truck routes for the project include Interstates 405 (I-405) for trucks traveling north or south and 105 (I-105) for those truck trips originating east of the project. Trucks using I-405 would exit on to I-105 traveling west. From I-105, all truck traffic would follow the same route. Truck traffic would exit I-105 on to Imperial Highway. The trucks would then proceed west on Imperial Highway and south via Vista Del Mar to the project entrance. (AFC 5.11-11-13; FSA Traffic & Transportation p. 4.9-11, 15.)

Port/Rail/Truck Activity

The Applicant has indicated that heavy equipment would be transported to the area by rail or ship. Both rail service and port facilities are available in the area for the Applicant to use. However, neither of these facilities would allow for shipment directly to the plant site. Therefore, this equipment will still need to be offloaded at either the rail terminal or port facility and be placed on trucks for final delivery to the plant site. These trucks will be required to obtain the necessary oversize and heavy haul trip permits from the California Department of Transportation (Caltrans) and other relevant jurisdictions. (FSA Traffic & Transportation p. 4.9-11, 15.)

New Pipeline Construction

The project will require the construction of new water, sewer, and ammonia pipelines which, by being buried beneath certain streets, will temporarily affect traffic flows. No additional electricity transmission lines or natural gas lines will be needed as a result of the project. The existing transmission lines and adjacent switchyard will be used. Existing gas lines have sufficient capacity for total plant operation. Connections to the existing natural gas lines already exist for Units 1 and 2, and no off-site upgrades are needed. The workforce for the project site will also be involved in new pipeline (i.e. water, sewer and ammonia pipelines) construction, so the number of workers and vehicle trips will not increase above the current worst case estimate.

Water Pipelines

Construction of new potable and reclaimed water supply lines are proposed for the project. These supply lines will begin at the intersection of Eucalyptus Drive and El Segundo Boulevard. The pipeline will be installed in a common trench that will extend approximately 1.5 miles, routed west along El Segundo Boulevard, north on Richmond Street, west on Grand Avenue, and south on Vista Del Mar. Immediately north of the project site, the new water supply pipelines will be routed under Vista Del Mar at an overpass currently used by the adjacent Chevron Refinery for routing pipe. Construction of these water pipelines will take place within the street right-of-way and temporarily affect traffic flow.

Effluent Water Discharge Line

A proposed sanitary waste pipeline will begin on the project property, be routed to the southern project boundary, and then extend for approximately 200 feet to an existing manhole at the intersection of The Strand and 45th Street in the City of Manhattan Beach.

Construction of the pipeline will take place within the street right-of way and temporarily impact traffic flow.

To ensure that the effects of pipeline construction activity are not significant, the Applicant will develop a traffic control plan. Pipeline construction traffic mitigation measures should include but not be limited to:

- Advance notice to affected property owners;
- Coordination with business(es) requiring heavy daily truck traffic;
- For multi-lane roadways, at least one lane will remain open in each direction;
- Lower speed limits through the construction/work zones;
- Adequate signing and appropriate traffic control devices;
- Adequate illumination on the work zone at night or during inclement weather.
- Construction work limitations to off-peak or evening hours;
- Temporary pedestrian walkways, if needed;
- Restoration of roadways to original condition.

Aqueous Ammonia Pipeline

A proposed pipeline carrying aqueous ammonia will begin at a junction in the Chevron Refinery and be routed for approximately 0.5 miles to the north boundary under Vista Del Mar via the underpass currently used by the Chevron Refinery to route pipelines. The pipeline will be routed under Vista Del Mar just north of the power plant complex. This pipeline will be added to others in an existing trench, which functions somewhat like a road underpass. Traffic on Vista Del Mar will not be affected. The pipeline will then be routed south along an existing retaining wall to the aqueous ammonia storage tank. (AFC p. 5.11-14; FSA Traffic & Transportation, pp. 4.9-13-15.)

MITIGATION:

- ☒ The Project Owner shall develop an off-site construction worker parking and materials staging plan. Condition: **TRANS-4.**
- ☒ The Project Owner shall prepare a Traffic Control Plan to assure that added peak commute traffic and in-street pipeline construction does not create unacceptable congestion impacts. To achieve this goal, the Project Owner will stagger arrival and departure times, minimize lane closures and use traffic control, and assure access to residences and businesses during pipeline construction. Condition: **TRANS-5.**

Power Plant Operation: The proposed project is expected to add two new full-time employees above the current operations employee levels. This increase in staff represents an insignificant increase in traffic levels as a result of the on-going operation the power plant.

Deliveries to the project site are expected for on-going operation of the plant. The incremental change in the number of delivery trips to the plant site is expected to be nominal and will generally occur during non-commute periods. Therefore, the resulting LOS on local roadways would remain unchanged from the existing LOS.

The transportation and handling of hazardous substances associated with the project can increase roadway hazard potential. Aqueous ammonia will be supplied via the new pipeline from the nearby Chevron Refinery, instead of being delivered by truck. If the aqueous ammonia pipeline is temporarily out of service, deliveries will be made by truck. Potential impacts from the delivery of other hazardous material to the project by truck can be mitigated to insignificance by compliance with Federal and State standards established to regulate the transportation of Hazardous Substances (see Condition of Certification **TRANS-3**).

The California Department of Motor Vehicles specifically licenses all drivers who carry hazardous materials. Drivers are also required to check for weight limits and conduct periodic brake inspections. Commercial truck operators handling hazardous materials are also required to take instruction in first aid and procedures on handling hazardous waste spills. Drivers transporting hazardous waste are required to carry a manifest, which is available for review by the California Highway Patrol at inspection stations along major highways and interstates.

The California Vehicle Code and the Streets and Highways Code (Sections 31600 through 34510) are equally important to ensure that the transportation and handling of hazardous materials are done in a manner that protects public safety. Enforcement of these statutes is under the jurisdiction of the California Highway Patrol.

The handling and disposal of hazardous substances are also addressed in the **HAZARDOUS MATERIALS** and **WASTE MANAGEMENT** sections. (AFC p. 5.11-15; FSA Traffic & Transportation, p. 4.9-11, 15, 16.)

Safety

Construction: Construction will require the use of large vehicles, occasionally including oversize or overweight trucks. Additionally, there will be deliveries to the power plant site of hazardous construction substances, such as gasoline, diesel fuel, oils, solvents, cleaners, paints, etc. (AFC p. 5.11-14; FSA Traffic & Transportation, p. 4.9-11.)

MITIGATION:

- ☒ Caltrans permits control vehicle size and weight. Condition: **TRANS-1**.
- ☒ California Highway Patrol and Caltrans permits control transport of hazardous substances. Condition: **TRANS-3**.
- ☒ Encroachment permits shall be obtained and construction-impacted roadways will be restored to their pre-construction condition. Condition: **TRANS-2** and **TRANS-7**.

Operation: There will be truck deliveries to the power plant site of hazardous materials, such as sulfuric acid, sodium hypochlorite, sodium hydroxide, gasoline, etc. If the aqueous ammonia pipeline is temporarily out of service, deliveries will be made by truck. Deliveries of hazardous materials will be over pre-arranged routes selected for their safety features,

including the absence of obstructions and curves, and minimal railroad traffic. (AFC p. 5.11-15; FSA Traffic & Transportation, p. 4.9-15, 16.)

MITIGATION:

- ☒ Hazardous materials haulers must be specially licensed by the California Highway Patrol. Condition: **TRANS-2** (See also **HAZARDOUS MATERIALS** section.)

Parking

Construction: The size of the construction workforce will require the workers to park in designated off-site areas with shuttle service provided to and from the project site. The traffic impact evaluation assumes that the construction employee parking will be at one or more of the following locations:

- Fed Ex site (northeast El Segundo);
- LAX Pershing site (west portion of the LAX property); and
- County/State Beach area (Hyperion, Grand Avenue, Dockweiler, and /or Marina del Rey located along the coast north of the project).

The Applicant is working with the County of Los Angeles to determine if some of the beach parking lots located north of the project site can be used to accommodate construction parking. The County has an obligation to give priority for public beach access, but does have a procedure for processing parking requests. The County will review the request for use of the beach parking lots and may grant access to one or more lots if the project parking does not compromise access to the beach. The Applicant is also pursuing other off-site parking options in addition to the beach parking lots. No matter which parking lots are selected, the Applicant will ensure that the workforce uses these lots, and it will provide shuttle service for the workers between the remote parking lots and the project site (see condition of certification **TRANS-4**). Therefore, there is no impact. (FSA Traffic & Transportation, p. 4.9-12.)

The Applicant agrees not to use unspecified open space or other commercial parking lots for construction worker parking for the project.

MITIGATION:

- ☒ The Project Owner shall develop an off-site construction worker parking and materials staging plan. Condition: **TRANS-4**.

Operation: Adequate on-site parking is available for the two new power plant personnel.

Cumulative Impacts

Potentially, development projects in the LAX, El Segundo and Manhattan Beach area could create a cumulative traffic impact if combined with project traffic. The list of projects included in Table 5.20-1 of the AFC represents transportation projects located within a five-mile radius

of the project site, a one-mile radius of proposed pipelines, and projects of potential regional significance.

Energy Commission staff reviewed the traffic volume from all cumulative projects, plus the power plant project and determined there would likely be increases in the congestion levels on area roadways and intersections. However, the construction schedules for these projects may not overlap with this project construction schedule. The impacts associated with the construction phase of the power plant project are short-term and the operational phase impacts will be insignificant due to the slight increase in employees (i.e., 2 new full-time employees) above current conditions, thus no significant impacts are expected under cumulative conditions. (AFC p. 5.11-16; FSA Traffic & Transportation, p. 4.9-16, 17.)

Findings

With the implementation of the Conditions of Certification, below, the project conforms to applicable laws related to traffic and transportation and all potential adverse traffic and transportation impacts will be mitigated to insignificance.

CONDITIONS OF CERTIFICATION

OVERWEIGHT & OVERSIZE VEHICLES

TRANS-1 The project owner shall comply with Caltrans and other relevant jurisdictions limitations on vehicle sizes and weights. In addition, the project owner or its contractor shall obtain necessary transportation permits from Caltrans and all relevant jurisdictions for roadway use.

Verification: In the Monthly Compliance Reports, the project owner shall submit copies of any permits received during that reporting period. In addition, the project owner shall retain copies of these permits and supporting documentation in its compliance file for at least six months after the start of commercial operation.

ENCROACHMENT PERMITS

TRANS-2 The project owner or its contractor shall comply with Caltrans and other relevant jurisdictions limitations for encroachment into public rights-of-way and shall obtain necessary encroachment permits from Caltrans and all relevant jurisdictions.

Verification: In Monthly Compliance Reports, the project owner shall submit copies of permits received during the reporting period. In addition, the project owner shall retain copies of these permits and supporting documentation in its compliance file for at least six months after the start of commercial operation.

LICENSED HAZARDOUS MATERIALS HAULERS

TRANS-3 The project owner shall ensure that permits and/or licenses are secured from the California Highway Patrol and Caltrans for the transport of hazardous materials.

Verification: The project owner shall include in its Monthly Compliance Reports, copies of all permits/licenses acquired by the project owner and/or subcontractors concerning the transport of hazardous substances.

OFF-SITE PARKING AND STAGING PLAN

TRANS-4 During construction of the power plant and all related facilities, the project shall develop a parking and staging plan for all phases of project construction to enforce a policy that all project-related parking occurs on-site or in designated off-site parking areas.

Verification: At least 60 days prior to start of site mobilization, the project owner shall submit the plan to the City of El Segundo and other jurisdictions affected by site selection, such as the City and/or County of Los Angeles for review and comment, and to the CPM for review and approval.

TRAFFIC CONTROL PLAN

TRANS-5 The project owner shall consult with the Cities of El Segundo, Manhattan Beach and Los Angeles, and prepare and submit to the CPM for approval a construction traffic control plan and implementation program which addresses the following issues:

- Timing of heavy equipment and building materials deliveries;
- Redirecting construction traffic with a flag person;
- Signing, lighting, and traffic control device placement if required;
- Need for construction work hours and arrival/departure times outside of peak traffic periods;
- Ensure access for emergency vehicles to the project site;
- Temporary travel lane closure; ~~and~~
- Access to adjacent residential and commercial property during the construction of all pipelines;
- Specify construction related haul routes; and
- Identify safety procedures for exiting and entering the site access gate.

Verification: At least 30 days prior to site mobilization, the project owner shall provide to the CPM a copy of the referenced documents.

AIRCRAFT HAZARD MARKINGS

TRANS-6 The HRSG stacks shall have all the lighting and marking required by the Federal Aviation Authority (FAA) so that the stacks do not create a hazard to air navigation. The project owner shall submit to the FAA Form 7460-1, Notice of Proposed Construction or Alteration and supporting documents on how the project plans to comply with stack lighting and marking requirements imposed by the FAA.

Verification: At least 30 days prior to the start of construction, the project owner shall provide copies of the FAA Form 7460-1 with copies of the FAA response to Form 7460-1, to the CPM and the City of El Segundo Planning Department.

ROADWAY REPAIRS

TRANS-7 Following completion of project construction, the project owner shall repair any damage to the segment of Vista Del Mar and other roadways affected by construction activity along with the primary roadways identified in the traffic control plan for construction traffic to the road's pre-project construction condition.

Prior to the start of construction, the project owner shall photograph, videotape or digitally record images of Vista Del Mar and the roadways that will be affected by pipeline construction and heavy construction traffic. The project owner shall provide the Compliance Project Manager (CPM), and the Cities of El Segundo, Manhattan Beach and Los Angeles with a copy of the images for the roadway segments under their jurisdiction. Also prior to start of construction, the project owner shall notify those cities about the schedule for project construction. The purpose of this notification is to postpone any planned roadway resurfacing and/or improvement projects until after the project construction has taken place and to coordinate construction related activities associated with other projects.

Verification: Within 30 days after completion of the redevelopment project, the project owner shall meet with the CPM and the Cities of El Segundo, Manhattan Beach, and Los Angeles to determine and receive approval for the actions necessary and schedule to complete the repair of identified sections of public roadways to original or as near original condition as possible. Following completion of any regional road improvements, the project owner shall provide to the CPM a letter from the Cities of El Segundo, Manhattan Beach and Los Angeles if work occurred within their jurisdictional public right of way stating their satisfaction with the road improvements.

LAWS, ORDINANCES, REGULATIONS & STANDARDS

TRAFFIC & TRANSPORTATION

APPLICABLE LAW	DESCRIPTION
FEDERAL	
49 CFR §171-177	Governs the transportation of hazardous materials, including the marking of the transportation vehicles.
14 CFR §77.13(2)(i)	Requires Applicant to notify FAA of any construction greater than an imaginary surface as defined by the FAA.
14 CFR 77.17	Requires Applicant to submit Form 7460-1 to the FAA. ESRP has received approval.
14 CFR §§77.21, 77.23 & 77.25	Regulations that outline the obstruction standards which the FAA uses to determine whether an air navigation conflict exists.
STATE	
California State Planning Law, Government Code §65302	Requires each city and county to adopt a General Plan consisting of seven mandatory elements to guide its physical development, including a circulation element.
CA Vehicle Code §35780	Requires approval for a permit to transport oversized or excessive load over state highways.
CA Vehicle Code §31303	Requires transporters of hazardous materials to use the shortest route possible.
CA Vehicle Code §32105	Transporters of inhalation hazardous materials or explosive materials must obtain a Hazardous Materials Transportation License.
California Department of Transportation Traffic Manual, Section 5-1.1	Requires Traffic Control Plans to ensure continuity of traffic during roadway construction.
Streets and Highways Code, Division 2, Chapter 5.5, Sections 1460-1470	Requires Encroachment Permits for excavations in city streets.

LOCAL	
City of El Segundo, Municipal Code	Establishes requirements for the movement of heavy vehicles, designation of truck routes, and construction within public streets.
City of El Segundo, General Plan, Circulation Element	Establishes LOS "D" or better for traffic within the City and requires mitigation of project-related traffic impacts.
City of Manhattan Beach, Municipal Code	Establishes requirements for the movement of heavy vehicles, designation of truck routes, and construction within public streets.
Los Angeles County Regional Transportation Plan	Establishes transportation and congestion goals for the County..

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VISUAL RESOURCES – Summary of Findings and Conditions

	POWER PLANT SITE	CUMULATIVE IMPACTS	LORS COMPLIANCE
Objectionable Appearance	MITIGATION	None	YES
	<p><u>Construction</u>: Construction equipment at the power plant site will have a temporary, and thus insignificant, visual impact.</p> <p><u>Operation</u>: The proposed project is located entirely within ESGS, an existing power plant adjacent to a recreational beach use area. Project appearance must be carefully designed to minimize impacts.</p> <p>MITIGATION:</p> <ul style="list-style-type: none"> ☑ The Project Owner shall complete and implement a comprehensive visual enhancement plan. Condition: VIS-1. ☑ The Project Owner shall paint or treat components to minimize impacts. Condition: VIS-5. ☑ The Project Owner shall install architectural screening. Condition: VIS-4. ☑ The Project Owner shall construct the proposed seawall with architectural design treatment. Condition: VIS-3. <p><i>References: AFC p. 6.5-1-3; FSA pp. 4.11-28</i></p>		
View Blockage	None	None	YES
	<p>The new power plant will not block more scenic features than the existing units 1 and 2. Exhaust stack height is being lowered, thus providing an enhancement. Perimeter landscaping along Vista Del Mar Avenue, however, could potentially block scenic views of the coast and ocean, <u>if not properly designed.</u></p> <p>MITIGATION:</p> <ul style="list-style-type: none"> ☑ The Project Owner shall complete and implement an approved perimeter screening and on-site landscape plan <u>that will provide screening of the facility while preserving view corridors to the ocean.</u> Condition: VIS-2. <p><i>References: FSA p. 4.11-21-28.</i></p>		
Scenic Designation	None	None	YES
	<p>There are no scenic designations related to the project viewshed.</p>		

Lighting	MITIGATION		
	None		
Visible Plume	YES		
	Insignificant		
Visible Plume	Insignificant		
	YES		

VISUAL RESOURCES - GENERAL

Visual resources analysis has an inherent subjective aspect. However, the use of generally accepted criteria for determining impact significance and a clearly described analytical approach aid in developing an analysis that can be readily understood.

The CEQA Guidelines define a “significant effect” on the environment to mean a “substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including . . . objects of historic or aesthetic significance (Cal. Code Regs. tit.14, § 15382).

Agreed-to Conditions

Over the course of more than two years, the parties involved in this proceeding and many other interested constituents met, debated, and ultimately agreed upon a project description and a set of conditions of certification that resolved issues. The result was stipulated testimony that contained significant harmony with a few dissenting views. No party to the proceeding provided testimony that opposed the Conditions of Certification proposed by the parties.

However, several Intervenor expressed concerns over landscaping details in their initial written testimony. CEC staff proposed in its rebuttal written testimony changes to **VIS-2**,

most notably the establishment of a Landscape Committee. The Commission believes that all parties agreed to this change, thus allowing Visual Resources concerns to be stipulated at the evidentiary hearings.

Objectionable Appearance

Construction: Construction of the proposed power plant would cause temporary visual impacts due to the presence of equipment, materials, and workforce. These impacts would occur at the proposed power plant site and construction laydown areas over a 24 month period of time. Demolition and construction will involve the use of heavy construction equipment, temporary storage and office facilities, and temporary laydown/staging areas. These structures and pieces of equipment will be stored on land adjacent to the project site in an area already exhibiting industrial visual character. Thus, power plant construction will result in a temporarily adverse but not significant visual impact.

Operation: The project region is situated on the western edge of the Santa Monica Bay coastline in the City of El Segundo adjacent to the City of Manhattan Beach. The region is industrial and adjacent to a residential beach community and a recreational beach area. The project will be built within the existing El Segundo Generating Station (ESGS). The project is a replacement of two of the four generating units at ESGS. The facility is adjacent to Vista Del Mar Avenue in the City of El Segundo and 45th Street in the City of Manhattan Beach. ESGS can be viewed from a number of residences in Manhattan Beach as well as from the beach in Manhattan Beach and El Segundo and from Vista Del Mar Avenue in El Segundo.

The site is industrial in appearance, exhibiting complex forms and lines and geometric shapes. The existing generating units and two large fuel oil storage tanks dominate the site. Within the generating station the units are painted blue and yellow and the exhaust stacks are light gray. The immediate project vicinity includes an industrial marine terminal for offloading oil from ships to the north and the Chevron oil refinery to the east, beaches to the west, and residences to the south. Overall visual quality of the ESGS site ~~and vicinity~~ is low ~~to moderate~~. (FSA p. 4.11-11.)

The major components of the project include two combustion turbine generators, two heat recovery steam generators (HRSG), a steam turbine, generator lead poles, a new seawall, piping, instruments, pumps, and other equipment. The most notable feature of the project, is the HRSG exhaust stacks (205 feet high), which would be the most visible. The new exhaust stacks, however will replace existing exhaust stacks (224 feet high) that serve units 1 and 2 resulting in a reduction in exhaust stack height.

The project also involves the removal of two fuel oil tanks that dominate the southern portion of the ESGS facility. These fuel oil tanks currently block views of the beach, of the northern coastline of Santa Monica Bay, and of the generating units for several homes adjacent to and along 45th Street in Manhattan Beach.

The project includes a complex and comprehensive landscaping plan for the entire ESGS facility. Besides perimeter landscaping, a landscaped berm will be added to the southern

A controversial topic regarding appearance was whether it was more objectionable to have an open, visible facility or a covered, smooth exterior facility. The parties reached agreement on this issue with a Condition of Certification that requires architectural treatment of the new units with banners.

The power plant site can be viewed from all directions. From the west, the site is visible from Santa Monica Bay and by users of the beach or bike path immediately adjacent to the site. From the North, beachgoers view the site and will see have uninterrupted views of the new facility with the replaced because units 1 and 2 which to be replaced are located on the north side of the site. Motorists driving south on Vista Del Mar Avenue can view the upper portions of the existing facility directly above their line of sight south along Vista Del Mar Avenue. From the east the only views of ESGS exist for users of Vista Del Mar as it passes adjacent to ESGS. The facility can also be seen from the Chevron refinery. The refinery, however, blocks further views from the East. In the south, residences at the northern edge of Manhattan Beach, particularly those along 45th Street can see varying portions of the facility depending upon distance and height above sea level. Users of the beaches south of the facility can see portions of the units.

New transmission poles on the facility will be in the same locations as existing poles and



approximately the same height. During construction, activities on the tank farm site could be seen from residences to the south of the facility.

In summary, the most notable change to viewer exposure that would be caused by the project is the removal of the fuel oil storage tanks. Likewise, the new landscaped berm is a noticeable change to viewer exposure. Additionally, the perimeter landscaping and sea wall along the bike path result in a change in viewer exposure. The new facility at the north end of the property replaces an existing facility and actually results in a lower height profile. Most of these latter changes appear to be enhancements since they decrease visibility (lower stack height) or result in a more aesthetically pleasing view (landscaping).

Due to the long-term nature of visual exposure that will be experienced from residences, and the sensitivity with which people regard their places of residence, residential viewers are considered to have high viewer concern. Recreational viewing is also rated high. Viewer concern is rated moderate to high for commuters motorists on Vista Del Mar, which include a combination of tourists, recreationists, residents, commuters, and others.

The viewshed of the plumes would encompass the immediate project vicinity and extend to the roadways and viewing areas within a couple of miles.

Key Observation Points

Various Key Observation Points (KOPs) were selected by the Applicant and by the Energy Commission staff's. The viewshed can be broken down into three general areas: a coastal industrial zone, a coastal open space, and coastal residential/ commercial. KOPs were used by the Energy Commission staff in the latter two areas.

The following paragraphs briefly summarize the concluding assessments of overall visual sensitivity at four KOPs. Overall visual sensitivity takes into account existing landscape visual quality, viewer concern, and overall viewer exposure.

[illegible]

KOP 1 Dockweiler Beach

KOP 1 depicts the before and after view toward the site from Dockweiler Beach State park from a distance of approximately ½ mile.



Existing View



Simulation View

ESGS views are unimpeded. Visual Quality is high, Visual Concern is high, and Visibility and Viewer Exposure are **very** high. Overall visual sensitivity is high. *FSA pp. 4.11-10.*

KOP2 Manhattan Beach State Park

KOP 2 depicts the before and after view toward the site from Manhattan Beach State park south of the project.



After removal of the tank farm and the implementation of the landscape screening, the view will appear generally as below:



Visual Quality is high. Viewer Concern is high, and ~~Visibility and overall~~ Viewer Exposure is moderate ~~to high~~. Overall visual sensitivity is moderate to high. *FSA pp. 4.11-12.*

KOP 3 Highland Avenue

KOP 3 depicts the after view toward the project site from Highland Avenue at a distance of approximately ½ mile.



Visual Quality is moderate, Viewer Concern is moderate to high, and Visibility and Viewer Exposure is moderate to high. Overall visual sensitivity is moderate to high. *FSA pp. 4.11-27.*

KOP 9 45th Street

KOP 9 depicts the existing view, showing one of the fuel tanks to be removed, and residences on 45th Street.



Visual Quality is moderate to high, Viewer Concern is high, and Visibility and Viewer Exposure to the project site would be low, but to the existing tank farm is very high. Overall visual sensitivity is high. *FSA pp. 4.11-13-14.*

Because the proposed project involves the replacement of existing units with new units the overall visual changes are generally insignificant. The parties to the proceeding reached agreement on several issues that resulted in agreement upon the following conditions of certification with which the Commission concurs. For example, there was general acceptance of architectural landscape screening elements on the power plant, as conceptually depicted below.



Additionally, since the project includes removal of the tank farm, views will be changed as shown below, including before and after vegetative screening.

MITIGATION:

- ☒ The Project Owner shall complete and implement a comprehensive visual enhancement plan. Condition: **VIS-1.**
- ☒ The Project Owner shall paint or treat components to minimize impacts. Condition: **VIS-5.**
- ☒ The Project Owner shall install architectural screening. Condition: **VIS-4.**
- ☒ The Project Owner shall construct the proposed seawall with architectural design treatment. Condition: **VIS-3.**

California Coastal Act Compliance

Section 30251 of the California Coastal Act (CCA) sets forth visual requirements for "permitted development." The Executive Director submitted a letter dated March 5, 2002, to the Energy Commission regarding the project's compliance with the CCA. The Applicant has

maintained several objections to the actions taken by the California Coastal Commission. The letter, generally speaking, describes the project as non-compliant with the California Coastal Act without mitigation. The letter also recommends that the Commission require visual enhancement measures. A representative of the California Coastal Commission attended the pre-hearing conference and evidentiary hearings.

Since the Coastal Commission's letter, the Applicant, Energy Commission staff, Coastal Commission staff, local cities, affected homeowners, and public have diligently reviewed the possible visual treatments that could be applied to the project and the ESGS property to minimize potential visual effects. The results of this effort are a number of consensus Conditions of Certification which effectively call for feasible measures to mitigate or enhance the visual effects of the project. Moreover, by these Conditions, the Coastal Commission will participate in the review of the Visual Enhancement Plan and the Landscaping Plan. The Energy Commission finds that, with the required Conditions of Certification, the project appears to meet the concerns of the Coastal Commission letter and complies with the California Coastal Act, and specifically, Section 30251.

View Blockage

View blockage describes the extent to which any previously visible landscape features are blocked from view by the project. Blockage of higher quality landscape features by lower quality features causes adverse impacts.

The new power plant will not block more scenic features than the existing units 1 and 2. Exhaust stack height is being lowered, thus actually providing an enhancement. Perimeter landscaping along Vista Del Mar Avenue, however, could potentially block scenic views of the coast and ocean if not carefully designed.

MITIGATION:

- ☒ The Project Owner shall complete and implement an approved perimeter screening and on-site landscape plan that will provide screening of the facility while preserving view corridors to the ocean. Condition **VIS-2**.

Scenic Designation

There are no state designated scenic highways within the project viewshed. Therefore, the project would not have a substantial adverse effect on scenic resources within a state scenic highway corridor.

Lighting

Construction: Limited construction during nighttime hours will require lighting, which will be temporary, and therefore insignificant. Removal of the Fuel Oil Storage tanks could result in increased light exposure from units 3 and 4 to the south.

Operation: Power plant lighting could cause nighttime visual impacts, unless mitigated by designing hooded or shielded lighting consistent with worker safety.

MITIGATION:

- ☑ The Project Owner shall design and install project lighting to minimize visibility from public viewing areas and to minimize illumination of the vicinity and the nighttime sky. Condition: **VIS-6.**
- ☑ Project Owner shall ensure construction lighting minimizes night lighting impacts. Condition: **VIS-8.**
- ☑ Project owner shall modify Units 3 and 4 lighting. Condition: **VIS-7.**

Visible Plumes

Modeling and analysis of potential changes to exhaust stack plume parameters concluded that there is no potential for significant impacts from HRSG exhaust stack plumes.

Cumulative Impacts

Cumulative impacts to visual resources would occur where project facilities or activities (such as construction) occupy the same field of view as other built facilities or impacted landscapes. It is also possible that a cumulative impact could occur if a viewer's perception is that the general visual quality of an area is diminished by the proliferation of visible structures (or construction effects such as disturbed vegetation), even if the new structures are not within the same field of view as the existing structures. The significance of the cumulative impact would depend on the degree to which (1) the viewshed is altered; (2) visual access to scenic resources is impaired; (3) visual quality is diminished; or (4) the project's visual contrast is increased.

In this case, the proposed project would minimally alter the view shed. The most significant changes are enhancements: reduction in stack height, perimeter landscaping and fuel oil tank removal combined with a landscaped berm. Therefore, the cumulative visual effects of project structures on the viewshed would not be significant.

Findings

With the implementation of the Conditions of Certification, below, the project conforms to applicable laws related to visual resources and all potential adverse visual resource impacts will be mitigated to insignificance.

CONDITIONS OF CERTIFICATION

VIS-1: Facility Visual Enhancement Plan. Before starting construction, the project owner shall complete a comprehensive visual enhancement plan that includes architectural screening, landscaping, painting, lighting, and other measures that result in an overall enhancement of views of the facility (i.e. the power plant site) from areas accessible to the public. The plan shall be made available for review and comment by the Executive Director of the Coastal Commission and for review and approval by CPM. The plan shall include:

Architectural screening: All industrial equipment below elevation 125' (i.e., below the elevation of the outlet dampers on the facility's exhaust stacks) and visible from the beach, coastal waters, Vista Del Mar Avenue, and other areas accessible by the public shall be screened using panels, wire mesh, louvers or other forms of architectural screening. The screening shall be opaque or semi-transparent and have a non-glare finish, and the color shall be harmonious with the facility's setting on a public beach. If the project owner proposes, and the Energy Commission concurs, that it is infeasible to shield portions of the facility using architectural screening, the project owner may instead propose other measures such as landscaping, berms, or fencing to provide the necessary screening. Any such proposal must be based on the definition of feasibility in California Coastal Act (Public Resources Code Section 30108) and is subject to review and comment by the Executive Director of the Coastal Commission, and review and approval by the Energy Commission.

Landscaping: Where used to screen the facility, vegetation shall be selected and maintained to provide year-round screening (e.g., evergreen species). Preference shall be given to native species and/or species requiring little or no irrigation, or at a minimum, non-invasive species. Soils shall be tested, amended as needed or replaced to ensure plant survival.

Other structural screening: Where berms, fencing, or other structural elements are selected as the primary method to screen the facility, the structures shall harmonize with the facility's setting on a public beach. If berms are used, they shall be vegetated and maintained with evergreen, native, and/or species requiring little or no irrigation. If fencing is used, it shall include a non-glare finish and be painted in a neutral color.

The Facility Visual Enhancement Plan shall include photographs showing existing conditions and simulated post-construction conditions from Key Observation Points (KOPs) around the facility (these may be the same KOPs that were used to develop the Staff Assessment). The plan shall also include anticipated costs for completing and maintaining the various visual enhancement measures and a detailed schedule for completing construction of these components.

Seawall Design Plan. Before starting construction, the project owner shall complete a plan of the seawall design for review and comment by the Executive Director of the Coastal Commission, the City of Manhattan Beach, and the City of El Segundo, and review and approval by the CPM. This plan shall include:

Final design: The seawall along the west side of the facility shall be textured and finished in a neutral color harmonious with its location adjacent to a public bike path and beach. If painted, graffiti-resistant paint shall be used.

Landscaping: Where used to enhance the seawall design, vegetation chosen shall be selected or maintained to provide year-round screening (e.g., evergreen species). Preference shall be given to native species and/or species requiring little or no irrigation.

This seawall design plan shall include photographs showing the existing conditions and simulated post-construction conditions from observation points along the bike path adjacent to the seawall, from the beach, and from other points where the seawall is highly visible. The plan shall also include anticipated costs for completing and maintaining the seawall and a schedule for construction.

Verification: At least 120 days prior to ground disturbance, the project owner shall submit the required Facility Visual Enhancement Plan and Seawall Design Plan to the Executive Director of the Coastal Commission and the Cities of Manhattan Beach and El Segundo for comment, and to the CPM for review and approval. If the CPM notifies the project owner that revisions of the submittal are needed before the CPM will approve the submittal, the project owner shall prepare and submit to the Coastal Commission staff, the Cities, and CPM a revised submittal.

VIS-2: Perimeter screening and on-site landscaping. The project owner shall prepare and implement an approved perimeter screening and on-site landscape plan.

Trees and landscaping along the eastern edge of the project site shall be designed to balance view corridors to the ocean with screening of the facility. The landscape plan shall be provided to the CPM for review and approval, and to the Executive Director of the California Coastal Commission, the City of El Segundo and the City of Manhattan Beach for review and comment. The CPM will consider timely comments from these parties, especially those regarding the balance struck in the landscape plan between view corridor preservation and screening of project components, in determining whether to approve the plan.

The project owner shall establish a Landscape Committee to develop the final landscape plan that will be submitted to the CPM for review and approval, and other parties for review and comment. The Landscape Committee will be comprised of two voting members from the City of El Segundo, two voting members from the City of Manhattan Beach, and two members (one vote) representing the project owner. Energy Commission and Coastal Commission staff will participate on the Committee in an advisory role. The project owner shall submit to the CPM for review and approval a detailed schedule for the Landscape Committee meetings that will ensure that the final landscape plan is provided to the CPM in accordance with the timeline established in the condition.

The screening shall, at a minimum, utilize landscape opportunities on all four boundaries of the project site. Landscape screening shall include: (a) continuous tree

canopies on the eastern roadside perimeter to enhance visual unity of the Vista del Mar road corridor, compatibility of the ESPR project with its coastal setting, and at least partial long-term screening of upper portions of the HRSGs; (b) tree and shrub plantings along Vista del Mar to screen views of the structures, while preserving view corridors to the Bay; (c) plantings along 45th Street to provide long-term screening of the tank farm site; and (d) tree planting on the western site perimeter to screen upper portions of Units 3 and 4 from the bike path. Landscape screening shall also include planting on the path (west) side of all new concrete walls constructed along the existing bike path. The plan shall comply with City of El Segundo Zoning codes (Title 15, Chapter 2, Sec. 15-2-14) pertaining to on-site landscaping. The final landscape plan shall reflect the agreed upon removal of existing urea tanks on the west side of the project site.

Final plant selection shall be made in consultation with the Compliance Project Manager (CPM), Coastal Commission staff, and the Cities of Manhattan Beach and El Segundo. Suitable irrigation shall be installed to ensure survival and desired rate of growth. The landscape screening and irrigation system shall be monitored for a period of five years to ensure survival. During this period all dead plant material shall be replaced.

To achieve year-round screening, evergreen species shall be used. Spacing of trees shall be sufficiently dense to ensure substantial screening by the tree canopy at maturity.

Prior to the start of construction, the project owner shall submit a landscape plan to the representatives of California Exotic Pest Plant Council, The Executive Director of the California Coastal Commission and the Cities of Manhattan Beach and El Segundo for review and comment, and to the CPM for review and approval. The plan shall include, but not be limited to:

- 1) A detailed landscape, grading, and irrigation plan, at a reasonable scale, which includes a list of proposed tree, plant, and shrub species and installation sizes, and a discussion of both the suitability of the plants for the site conditions and mitigation objectives, and conformance with the specific provisions of the Coastal Commission decision, including its 1b and 2b specifying preference for native, non-invasive, and drought tolerant species. A list of potential plant species that would be both viable and non-invasive in this location shall be prepared by a qualified professional landscape architect familiar with local growing conditions, with the objective of providing the widest possible range of species from which to choose. The final planting plan shall include an all-inclusive list of plants to be used in order to ensure exclusion of potentially invasive species.
- 2) A demonstration of how the screening conditions shall be met, including:
 - a) evidence provided by a qualified landscape architect that the specified species are both viable and available;

- b) graphic documentation on the plan and through digital photo simulations of Bay view corridors and power plant screening which would exist from Vista del Mar and the residential area east of Highland that has views of the project site after project construction; and
 - c) a description of tall and short shrub planting zones along Vista del Mar, such that screening of the existing and proposed power plants is maximized, while the aforementioned Bay view corridors are retained.
- 3) Elevation views or visual simulations of the landscape screening at maturity, in order to show the extent of screening that the landscaping is expected to achieve from the west side of the project, from 45th Street and from Vista del Mar.
 - 4) A detailed schedule for completion of the installation.
 - 5) Maintenance procedures for the entire project site, including any needed irrigation and a plan for routine and regular debris removal as needed to preserve a neat and well-maintained appearance, for the life of the project.
 - 6) A procedure for monitoring and replacement of all unsuccessful plantings for the life of the project.
 - 7) A chart and key plan showing conformance with City of El Segundo landscape regulations.
 - 8) Soil tests shall be performed on both on-site and imported soil where landscaping is to take place. Soil shall be amended on the basis of those tests if needed to ensure long-term viability of plantings.

The property owner shall meet the City of El Segundo's requirements for Vehicle Use Area (VUA) landscaping in the tank farm area by providing the required trees on the existing containment berm and other areas immediately adjacent to the portion of the tank farm area to be used for paved staging, not including the area to be striped for vehicle parking.

The Landscape Plan shall be consistent with the Landscape Concept Plan presented at Evidentiary Hearings, with modifications for VUA landscaping, revisions to depict the 45th Street landscape berm, and modifications to accord with item #2, above.

The project owner shall not implement the plan until the project owner receives written approval of the plan from the CPM.

Verification: At least 30 days prior to the first scheduled Landscape Committee meeting, the project owner shall submit the Committee schedule to the CPM for review and approval. At least 120 days prior to ground disturbance, the project owner shall submit the perimeter screening and onsite landscape plan to the Executive Director of the Coastal

Commission and the Cities of Manhattan Beach and El Segundo for comment, and the CPM for review and approval. If the CPM notifies the project owner that revisions of the submittal are needed before the CPM will approve the submittal, the project owner shall prepare and submit to the Coastal Commission staff, the Cities, and the CPM a revised submittal.

The project owner shall implement the landscape plan prior to start of commercial operation. The project owner shall notify the CPM within seven days after completing installation of the landscape plan that the planting and irrigation system are ready for inspection.

The project owner shall report landscape maintenance activities, including replacement of dead vegetation, for the previous year of operation in the Annual Compliance Report.

VIS-3: Design treatment of seawall. The project owner shall construct the proposed seawall with architectural design treatment to reduce visual monotony, enhance design quality and interest, and discourage graffiti. Techniques may include pre-cast or cast-in-place texturing, split-faced concrete block, or other methods feasible to produce a textured surface.

Prior to the start of construction, the project owner shall submit a design plan for the seawall, consistent with the Landscape Concept Plan, to the Executive Director of the Coastal Commission and City of El Segundo for review and comment, and to the CPM for review and approval. The treatment plan shall include:

- 1) Specification, and 11" x 17" color elevations, of the treatment proposed for use on the seawall;
- 2) A detailed schedule for completion of construction; and,
- 3) A procedure to ensure proper maintenance, including graffiti removal, for the life of the project.

Seawall construction shall not commence until the design plan has been approved by the CPM.

Verification: At least 120 days prior to start of construction, the project owner shall submit the seawall design plan to the Executive Director of the Coastal Commission and City of El Segundo for review and comment and to the CPM for review and approval.

If the CPM notifies the project owner of any revisions that are needed before the CPM will approve the plan, the project owner shall submit a revised plan to the CPM.

Not less than 30 days prior to start of commercial operation, the project owner shall notify the CPM that the seawall is ready for inspection.

The project owner shall provide a status report regarding wall maintenance in the Annual Compliance Report.

VIS-4: Architectural screening of power plant. The project owner shall install architectural screening to cover the outer framework of the HRSG structures of the new proposed

Units 5 through 7 and reduce visibility of the mechanical equipment at elevations between 10 and 125 feet of the superstructures, except where infeasible due to excessive loading on support structures or where operation or safety requirements do not allow covering of a surface area. Such screening shall conform to the requirements of the Energy Commission's decision. Such screening shall use as a baseline the Applicant's Visual Enhancement Proposals as of June 24, 2002, and preferably minimize or avoid gaps between banners.

The Project Owner shall have the burden to show infeasibility or incapability of screening by submittal of such information in the Architectural Screening Plan.

Prior to the start of construction, the project owner shall submit an architectural screening plan to the Executive Director of the California Coastal Commission (as a part of the facility Visual Enhancement Plan described in Condition **VIS-1**), and the Cities of El Segundo and Manhattan Beach for review and comment, and to the CPM for review and approval. The screening plan shall include:

- 1) Detailed plans and specifications sufficient to enable the CPM and Chief Building Official (CBO) to determine adequacy and performance of the proposed screening. Determination of adequacy includes confirmation of consistency with the terms of the Energy Commission's decision. Determination of adequacy also requires sufficient evidence that the screening can be installed to be stable, uniform, able to withstand anticipated wind loads, and attractively mounted, without sagging, tearing, unsightly discoloration, or adverse visual effects from the mounting system itself; and with sufficient durability to allow good performance between maintenance cycles. Required performance data shall include design information of sufficient detail and specificity to establish confidence in the design's ability to perform as desired, or to clearly establish limitations on the feasibility of particular measures.
- 2) Sufficient information to fully document and explain any areas where screening is infeasible or not possible. The information shall further include supporting engineering drawings analysis and calculations or specific safety or operational constraints or regulations.
- 3) 11" x 17" color simulations at life-size scale of the treatment proposed for use on project structures.
- 4) A detailed schedule for completion of the treatment.
- 5) A procedure to ensure proper treatment maintenance for the life of the project.

Verification: Not later than 120 days prior to start of construction, the project owner shall submit the final architectural screening plan and details to the Executive Director of the Coastal Commission and the Cities of El Segundo and Manhattan Beach for review and comment, and to the CPM for review and approval.

If the CPM notifies the project owner of any needed revisions before the CPM will approve the plan, the project owner shall submit a revised plan to the CPM.

Not less than thirty 30 days prior to the start of commercial operation, the project owner shall notify the CPM that the architectural screening is ready for inspection.

The project owner shall provide a status report regarding screening maintenance in the Annual Compliance Report.

VIS-5: Structure surface painting and treatment. Prior to the start of commercial operation, the project owner shall paint or treat ~~portions of Units 5, 6 and 7~~ project structures visible to the public, such that their colors minimize visual intrusion and contrast by blending with the landscape; their surfaces do not create glare; and they are consistent with local laws, ordinances, regulations, and standards.

The project owner shall consult with representatives of the Cities of El Segundo and Manhattan Beach to determine if specific treatment or painting options that may improve the aesthetic appearance of the project are desired, and provide a report to the CPM.

Prior to the start of construction, the project owner shall submit to the Executive Director of the Coastal Commission and the Cities of El Segundo and Manhattan Beach for review and comment, and to the CPM for review and approval, a specific treatment plan whose proper implementation will satisfy these requirements. The treatment plan shall include:

- a) Specification, and 11" x 17" color simulations at life size scale, of the treatment proposed for use on project structures, including structures treated during manufacture;
- b) A list of each major project structure, building, tank, transmission line tower and/or pole, and fencing/walls specifying the color(s) and finish proposed for each (colors must be identified by name and by vendor brand or a universal designation);
- c) Two sets of brochures and/or color chips for each proposed color;
- d) Samples of each proposed treatment and color on each material to which they would be applied that would be visible to the public;
- e) A detailed schedule for completion of the treatment; and
- f) A procedure to ensure proper treatment maintenance for the life of the project.

The project owner shall not specify to the vendors the treatment of any buildings or structures treated during manufacture, or perform the final treatment on any buildings or structures treated on-site, until the project owner receives notification of approval of the treatment plan by the CPM.

Verification: The project owner shall submit its proposed treatment plan at least 90 (ninety) days prior to ordering the first structures that are color treated during manufacture.

If revisions are required, the project owner shall provide the CPM with a revised plan within 30 (thirty) days of receiving notification that revisions are needed.

Prior to commercial operation, the project owner shall notify the CPM that all buildings and structures are ready for inspection.

The project owner shall provide a status report regarding treatment maintenance in the Annual Compliance Report.

VIS-6: Project lighting. Prior to the start of commercial operation, the project owner shall design and install new permanent lighting for Units 5, 6 and 7, such that light bulbs and ~~the fronts of~~ reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project, the vicinity, and the nighttime sky is minimized. To meet these requirements the project owner shall ensure that:

- a) Lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light source is shielded to prevent light trespass outside the project boundary;
- b) All lighting shall be of minimum necessary brightness consistent with worker safety;
- c) Wherever feasible and safe, lighting shall be kept off when not in use; and
- d) A lighting complaint resolution form shall be used by plant operations to record all lighting complaints received and document the resolution of those complaints. All records of lighting complaints shall be kept in the on-site compliance file.

Verification: At least 60 days prior to ordering any permanent exterior lighting, the project owner shall submit to the CPM for review and comment written documentation describing the lighting control measures and fixtures, hoods, shields proposed for use, and incorporate the CPM's comments in lighting equipment orders.

Prior to the first turbine roll, the project owner shall notify the CPM that the lighting has been completed and is ready for inspection. If the CPM notifies the project owner that modifications to the lighting are needed to minimize impacts, within 30 days of receiving that notification the project owner shall implement the modifications and notify the CPM that the modifications have been completed.

The project owner shall report any lighting complaints and documentation of resolution in the Annual Compliance Report, accompanied by any lighting complaint resolution forms for that year.

VIS-7: Site lighting. Prior to demolition of existing storage tanks, the project owner shall modify Unit 3 and 4 permanent lighting, such that light bulbs and ~~the fronts of~~ reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project, the vicinity, and the nighttime sky is minimized. To meet these requirements the project owner shall ensure that:

- a) Lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light source is shielded to prevent light trespass outside the project boundary;
- b) All lighting shall be of minimum necessary brightness consistent with worker safety;
- c) The project owner shall implement where feasible and practical modifications of circuits in order to allow turning off specific lights when not in use; and
- d) A lighting complaint resolution form shall be used by plant operations to record all lighting complaints received and document the resolution of those complaints. All records of lighting complaints shall be kept in the on-site compliance file.

Verification: At least 60 days prior to ordering of any new permanent exterior lighting for Units 3 and 4, the project owner shall submit to the CPM for review and comment written documentation describing the lighting control measures and fixtures, hoods, shields proposed for use, and incorporate the CPM's comments in lighting equipment orders.

Prior to demolition of the tanks, the project owner shall notify the CPM that the lighting modifications to Unit 3 and 4 have been completed and are ready for inspection. If the CPM notifies the project owner that modifications to the lighting are needed to minimize impacts, within 30 days of receiving that notification the project owner shall implement the modifications and notify the CPM that the modifications have been completed.

The project owner shall report any complaints about permanent lighting and provide documentation of resolution in the Annual Compliance Report, accompanied by any lighting complaint resolution forms for that year.

VIS-8: Construction Lighting. Prior to site mobilization, the project owner shall ensure that lighting for construction of the power plant is used in a manner that minimizes potential night lighting impacts, as follows:

- a) All lighting shall be of minimum necessary brightness consistent with worker safety.
- b) All fixed position lighting shall be shielded, hooded, and directed downward to minimize backscatter to the night sky and prevent light trespass (direct lighting extending outside the boundaries of the construction area).
- c) Wherever feasible and safe, lighting shall be kept off when not in use and motion detectors shall be employed.
- d) A lighting complaint resolution form shall be maintained by plant construction management, to record all lighting complaints received and to document the resolution of that complaint.
- e) All construction-related lighting shall be completely shielded or screened so as not to be visible to residents of 45th Street in Manhattan Beach. Construction lighting in the tank farm area shall be limited to the hours of 7:30 a.m. to 6:00 p.m. Monday through Friday and 9:00 a.m. to 6:00 p.m. Saturday, except as necessary for safety or security purposes.

Verification: Within seven days after the first use of construction lighting, the project owner shall notify the City of Manhattan Beach and the CPM that the lighting is ready for inspection.

If the CPM notifies the project owner that modifications to the lighting are needed to minimize impacts, within 15 days of receiving that notification the project owner shall implement the necessary modifications and notify the CPM that the modifications have been completed.

The project owner shall report any lighting complaints and documentation of resolution in the Monthly Compliance Report, accompanied by any lighting complaint resolution forms for that month.

VIS-9: Temporary landscaping and 45th Street Berm. Temporary landscaping shall be installed prior to the start of ground disturbing activities at the site in those opportunity areas that do not create a hindrance to construction activities. Soils shall be tested, amended as needed or replaced to ensure plant survival. Temporary landscaping shall be maintained for the duration of construction, and shall be designed to the extent feasible to be retained permanently as part of the perimeter landscaping plan required in Condition of Certification **VIS-2**. Installation of the 45th Street berm shall be initiated concurrent with construction of the new tank farm access road.

Prior to start of ground disturbance, the project owner shall submit a temporary perimeter landscape plan and final berm plan to the Cities of Manhattan Beach and El Segundo and the Executive Director of the Coastal Commission for review and comment, and to the CPM for review and approval. The plans shall include, but not be limited to:

- a) A detailed landscape, grading and irrigation plan, at a reasonable scale, which includes an all-inclusive list of proposed tree, plant, and shrub species and installation sizes, and a discussion of the suitability of the plants for the site conditions and mitigation objectives. A list of potential plant species that would be viable and non-invasive in this location shall be prepared by a qualified professional landscape architect familiar with local growing conditions, with the objective of providing the widest possible range of species from which to choose. The plan shall demonstrate how the screening shall be met, including:
- b) Elevation views or visual simulations of the landscape screening at one year's growth in order to show the extent of screening that the landscaping is expected to achieve from the west side of the project, 45th Street and from Vista del Mar.
- c) A detailed schedule for completion of the installation.
- d) Maintenance procedures for the entire project site, including any needed irrigation and a plan for routine and regular debris removal as needed to preserve a neat and well-maintained appearance, for the life of the project; and
- e) A procedure for monitoring and replacement of unsuccessful plantings.

The project owner shall not implement the plan until the project owner receives written approval from the CPM.

Verification: At least 60 days prior to start of ground disturbance, the project owner shall submit the temporary perimeter landscape plan and final berm plan to representatives of

California Exotic Pest Plant Council, the Executive Director of the Coastal Commission and Cities of Manhattan Beach and El Segundo for comment, and to the CPM for review and approval. If the CPM notifies the project owner that revisions of the submittal are needed before the CPM will approve the submittal, the project owner shall prepare and submit to the CPM a revised plan.

The project owner shall notify the CPM within seven days after completing installation of the 45th Street berm that the berm is ready for inspection. The project owner shall notify the CPM within seven days after completing installation of the temporary landscape screening that the planting and irrigation system are ready for inspection.

The project owner shall report landscape maintenance activities, including replacement of dead vegetation, for the previous month of construction in the Monthly Compliance Report.

LAWS, ORDINANCES, REGULATIONS & STANDARDS

VISUAL RESOURCES

APPLICABLE LAW	DESCRIPTION
<i>FEDERAL</i>	
NA	There are no applicable Federal LORS for the section of visual.
<i>STATE</i>	
California Coastal Act, Section 30251	Describes view and visual enhancement requirements for permitted development
<i>LOCAL</i>	
City of El Segundo Coastal Plan and Zoning Code	Provides goals and requirements pertaining to the appearance and enhancement of visual quality.
City of Manhattan Beach Land Use Policies and Goals General Plan	Provides goals and requirements pertaining to the appearance and enhancement of visual quality in the residences adjacent to the plant. The policies of the City of Manhattan Beach do not apply to the project. However, a General Plan policy and goal indicate the City's intent with regard to the potentially affected Manhattan Beach residential area south of the project site.

WASTE MANAGEMENT – Summary of Findings and Conditions

	POWER PLANT SITE	CUMULATIVE IMPACTS	LORS COMPLIANCE
Excavation	MITIGATION	None	YES
	<p>Prior Environmental Site Assessments show the presence of contaminants in the soil and groundwater under the existing power plant complex. Thus, it is probable that contaminated soil and water will be encountered during the demolition of the existing foundations and excavation for the project's new foundation.</p> <p>MITIGATION:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The Project Owner and contractor, if necessary, will obtain a hazardous waste generator identification number. Condition: WASTE-1 <input checked="" type="checkbox"/> The Project Owner shall employ a registered engineer and prepare a waste management plan and a site remediation plan. Conditions: WASTE-3 to WASTE-6 <input checked="" type="checkbox"/> Contaminated soils will be tested and, if appropriate, treated or disposed at a Class I landfill. Conditions: WASTE-5 and WASTE-6. <p><i>References: AFC p. 5.14-1, 7-17; FSA Waste Mgt., p. 4.12-3-5.</i></p>		
Construction Wastes	MITIGATION	None	YES
	<p>Power plant construction will generate typical construction wastes, such as lumber, plastic, scrap metal, glass, excess concrete, empty containers, and packaging. These construction wastes are either recycled or disposed at a Class III landfill.</p> <p>MITIGATION:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The Project Owner shall prepare a waste management plan to assure the appropriate handling of wastes. Condition: WASTE-3. <p><i>References: AFC Table 5.14-4; FSA Waste Mgt. p. 4.12-5.</i></p>		
Non-hazardous Wastes	Insignificant	None	YES
	<p>Typical non-hazardous operation wastes include a small volume of maintenance-related trash, office trash, empty containers, broken or used parts, used packaging materials, and used air filters. These non-hazardous wastes will be routinely collected by a licensed hauler and disposed at a Class III landfill.</p> <p><i>Reference: AFC Table 5.14-5; FSA Waste Mgt., p. 4.12-5.</i></p>		

Hazardous Wastes	MITIGATION	None	YES
	<p>Hazardous wastes will include recyclable materials such as used oil, filters, rags, etc. Non-recyclable hazardous wastes include oil absorbents, welding materials, paints, used grit, weak acids, used batteries, and asbestos and are properly disposed at Class I landfills.</p> <p>MITIGATION:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> The Project Owner shall prepare a waste management plan. Condition: WASTE-3. <input checked="" type="checkbox"/> The Project Owner shall report any potential enforcement action related to waste management. Condition: WASTE-2. <p><i>Reference: AFC p. 5.14-8, 9-17; FSA Waste Mgt., p. 4.12- 6.</i></p>		
Disposal Capacity	None	None	YES
	<p>The capacities of available Class I and Class III landfills far exceed the construction and operation wastes generated by this project.</p> <p><i>Reference: AFC p. 5.14-3, 24; FSA Waste Mgt., p. 4.12- 6.</i></p>		

WASTE MANAGEMENT - GENERAL

Different types of wastes will be generated during the construction and operation of the proposed project and must be managed appropriately to minimize the potential for adverse human and environmental impacts. These wastes are designated as hazardous or non-hazardous according to the toxic nature of their respective constituents. This analysis assesses the adequacy of the waste management plan with respect to handling, storage and disposal of these wastes in the amounts estimated for the project.

Excavation

A Phase I Environmental Site Assessment (ESA) was prepared in 1997 (CH2M Hill 1997). The purpose of the ESA was to determine the potential for the presence or likely presence of any hazardous substances or petroleum products under conditions that may indicate a release or threat of a release from present or past activities. The Phase I ESA identified total petroleum hydrocarbons (TPH) and volatile organic compounds (VOCs) and metals in soils and in groundwater.

The Phase I ESA provided the basis for additional sampling and analysis of soil and groundwater performed as part of several Phase II ESAs and other site assessments to further define the extent of existing contamination. The results of these investigations and a new investigation are summarized in a 1998 report (Woodward-Clyde 1998). This report identified remediation issues for several identified localized areas at the power plant complex. The contaminants identified include TPH, VOCs, semi-volatile organic compounds (SVOCs), and metals in soil and groundwater.

Energy Commission staff has reviewed the Phase I and II ESAs and has concerns about the lack of remedial investigations conducted beneath existing structures which are to be

demolished. Angle borings beneath these structures were not obtained and thus investigations will not occur until the structures are removed. Staff has requested and Applicant has agreed to provide a Remedial Investigation Workplan (RI Workplan) prior to demolition. This plan would include a detailed site characterization plan with soil and groundwater sampling and analysis to determine the extent and nature of contamination existing beneath these structures. The RI Workplan would be provided to the Los Angeles County Fire Department, the California Department of Toxic Substances Control (DTSC), the LARWQCB, the City of El Segundo Fire department, and to the CEC CPM for review and approval. If contaminated soil or groundwater is found to exist, the project owner would contact representatives of the above-named agencies for further guidance and possible oversight.

Site preparation will also include dewatering of the soil after removal of the foundations of existing Units 1 and 2. Groundwater levels will be lowered as much as 14 feet below average levels. Because TPH and VOCs have been detected in groundwater, treatment to meet the waste discharge requirements of the LARWQCB will be required prior to discharge to Santa Monica Bay. A pump test will be performed according to a test protocol developed by the Applicant to ensure adequate treatment and flow rates.

Demolition, dewatering, and construction are expected to generate both solid and liquid hazardous wastes. Hazardous wastes associated with Asbestos Containing Materials (ACM), lead-based paint, contaminated soil, and groundwater are expected. Much ACM has already been removed (about 60 percent of the identified ACM) but the quantity of materials containing lead-based paint is unknown (ESPR 2000a, AFC p.5.14-8). Estimates of ACM and lead-based paint materials are as high as 163,000 sq. feet of materials. During demolition, as much as 40,000 cubic yards of soil will be excavated and managed. More may be encountered in other areas including soils beneath the footprints of Units 1 and 2 and other structures to be demolished. All excavated soil will be characterized and managed according to the Applicant's Draft Waste Management Plan and Hazardous Materials and Hazardous Waste Management Plan. If soils are classified as hazardous wastes, the City of El Segundo Fire department and the Los Angeles County Hazardous Materials Division will be notified. The soil will be transported to a soil recycling facility or a Class I landfill. It is also estimated that dewatering will generate as much as 13 to 65 million gallons of contaminated groundwater for treatment and discharge according to the permit conditions of an NPDES permit. (AFC p. 5.14-1, 7-17; FSA Waste Mgt., p. 4.12-3-5.)

MITIGATION:

- ☒ The Project Owner and contractor, if necessary, will obtain a hazardous waste generator identification number. Condition: **WASTE-1**
- ☒ The Project Owner shall employ a registered engineer and prepare a waste management plan and a site remediation plan. Conditions: **WASTE-3 to WASTE-6**
- ☒ Contaminated soils will be tested and, if appropriate, treated or disposed at a Class I landfill. Conditions: **WASTE-5 and WASTE-6.**

Construction Wastes

Preparation and construction of the power plant will generate both hazardous and non-hazardous wastes. The non-hazardous component of the construction-related wastes will include waste paper, wood, glass, scrap metal, and plastics, from packing materials, waste lumber, excess concrete, insulation materials, and non-hazardous chemical containers. Management of these wastes will be the responsibility of the contractors. These wastes will be segregated, where practical, for recycling. Those that cannot be recycled will be placed in covered containers and removed on a regular basis by a certified waste handling contractor for disposal at a Class II or III facility.

The relatively small quantities of hazardous materials to be generated during this construction phase will mainly consist of used oil, waste paint, spent solvents, materials, used batteries, and cleaning chemicals. These wastes will be recycled or disposed of at licensed hazardous waste treatment or disposal facilities. The construction contractor will be considered the generator of the hazardous waste produced during construction and will be responsible for compliance with applicable federal and state regulations regarding licensing, personnel training, accumulation limits, reporting requirements, and record keeping. The Applicant has in place a waste management plan to assure the appropriate handling of wastes. (AFC Table 5.14-4; FSA Waste Mgt., p. 4.12-5.)

MITIGATION:

- ☒ The Project Owner shall prepare a waste management plan to assure the appropriate handling of wastes. Condition: **WASTE-3.**

Non-Hazardous Wastes

Under normal operating conditions, the typical, solid non-hazardous wastes will include routine maintenance-related trash, office wastes, empty containers, broken or used parts, and used packaging materials and air filters. Some of the wastes will be recycled to minimize the quantity to be disposed of in a landfill. The non-recyclables will be disposed of at a non-hazardous waste disposal facility. The volume of non-hazardous wastes from the proposed and similar gas-fired facilities is typically small and readily accommodated within area disposal facilities. For the proposed facility, such wastes are expected to be negligible compared to the capacity available Class III landfills. (AFC Table 5.14-5; FSA Waste Mgt., p. 4.12-5, 5.)

Hazardous Wastes

The hazardous waste quantities generated by the project will be minimal. The operations-related hazardous wastes will include spent air pollution control catalysts, used oil and air filters, used cleaning solvents, and used batteries. Some of these wastes will be recycled. The non-recyclables will be disposed of in a Class I disposal facility. (AFC p. 5.15-8, 9-17; FSA Waste Mgt., p. 4.12-6.)

MITIGATION:

- ☑ The Project Owner shall prepare a waste management plan. Condition: **WASTE-3.**
- ☑ The Project Owner shall report any potential enforcement action related to waste management. Condition: **WASTE-2.**

Disposal Capacity

The Project Owner provided a listing of the three area non-hazardous (Class II or III) waste disposal facilities (Corona, Simi Valley & Orange County) available for use by proposed project (AFC Table 5-14-1). The listing includes information on remaining capacity, location, and anticipated closure year. This information shows that the volume of the waste from project construction and operation would be insignificant relative to available disposal capacity.

In its written comments on the PMPD, the Los Angeles County Department of Public Works commented that a “shortfall in permitted daily landfill capacity may be experienced in the County within the next few years.” The Department asks that measures which would mitigate this potential impact, together with the potential cumulative impact, be discussed. The City of El Segundo also commented on the need to discuss handling of demolition wastes that may contain some hazardous element. Condition of Certification **WASTE-3** requires a Waste Management Plan which includes not only identification of the amount and types of wastes, but also methods of managing each waste, including storage, treatment methods, testing methods, methods of transportation, disposal requirements and sites, and recycling and waste minimization/reduction plans. As affected local agencies, both Los Angeles County and the City of El Segundo would be included in the review and comment on the proposed Plan, which must be approved prior to site mobilization. Thus, the comments have been addressed in a Waste Management Plan creation process which will include these specific concerns.

The Project Owner also provided a listing of the three major Class I landfills in California available for the disposal of hazardous wastes from the proposed and similar projects. These are Safety Kleen (Buttonwillow) in Kern County, Chemical Waste Management (Kettleman Hills) in Kings County, and Laidlaw in Imperial County. There is a total of more than twenty million cubic yards of disposal space within these landfills. Thus, adequate disposal space would be available with respect to all hazardous wastes generated during the operational life of the proposed project. (AFC p. 5.14-3, 24; FSA Waste Mgt., p. 4.12-6.)

In its written comments on the PMPD, the Los Angeles County Department of Public Works also commented that the existing hazardous waste management (HWM) infrastructure in this County is inadequate to handle waste currently being generated. All of the hazardous waste sites identified above are not in Los Angeles County, and thus the proposed disposal of hazardous project wastes would not affect Los Angeles County. Moreover, construction will generate relatively few hazardous wastes, and most of the larger-volume operation wastes are recyclable.

Cumulative Impacts

As described above, there is adequate capacity in the disposal facilities available with respect to the hazardous and non-hazardous wastes associated with the proposed project. Therefore, the wastes from the construction and operation of the proposed project and its related facilities will not significantly impact the capacity of these landfills and will not create a cumulative impact. (FSA Waste Mgt., p. 4.12-6, 7.)

Finding

With the implementation of the Conditions of Certification, below, the project conforms to applicable laws related to waste management and all potential adverse impacts related to waste management will be mitigated to insignificance.

CONDITIONS OF CERTIFICATION

WASTE GENERATOR IDENTIFICATION NUMBER

WASTE-1: The project owner and, if necessary, its construction contractor, shall each obtain a hazardous waste generator identification number from the Department of Toxic Substances Control prior to generating any hazardous waste.

Verification: The project owner shall notify the CPM via the monthly compliance report of its receipt and keep a copy of the identification number on file at the project site.

WASTE MANAGEMENT ENFORCEMENT ACTION

WASTE-2: Upon becoming aware of any impending waste management-related enforcement action by any local, state, or federal authority, the project owner shall notify the CPM of any such action taken or proposed to be taken against the project itself, or against any waste hauler or disposal facility or treatment operator with which the owner contracts.

Verification: The project owner shall notify the CPM in writing within 10 days of becoming aware of an impending enforcement action. The CPM shall notify the project owner of any changes that will be required in the manner in which project-related wastes are managed.

WASTE MANAGEMENT PLAN

WASTE-3: Prior to the start of both site mobilization and project operation, the project owner shall prepare and submit to the ~~LA County Department of Hazardous Materials for review and comment and to the~~ CPM for review and approval, and to local agencies, if applicable, for review and comment, a waste management plan for all wastes generated during construction and operation of the facility, respectively. The plans shall contain, at a minimum, the following:

- A description of all waste streams, including projections of frequency, amounts generated and hazard classifications; and
- Methods of managing each waste, including storage, treatment methods and companies contracted with for treatment services, waste testing methods to assure correct classification, methods of transportation, disposal requirements and sites, and recycling and waste minimization/reduction plans.

Verification: No less than 30 days prior to the start of site mobilization, the project owner shall submit the demolition and construction waste management plan to ~~the Los Angeles County Department of Hazardous Materials~~ and to local agencies, if applicable, for review and comment, and the CPM. The operation waste management plan shall be submitted no less than 30 days prior to the start of project operation. The project owner shall submit any required revisions within 20 days of notification by the CPM (or mutually agreed upon date). In the Annual Compliance Reports, the project owner shall document the actual waste management methods used during the year compared to planned management methods.

REGISTERED PROFESSIONAL ENGINEER/GEOLOGIST

WASTE-4: The project owner shall have a Registered Professional Engineer or Geologist, with experience in remedial investigation and feasibility studies, available for consultation during soil excavation and grading activities. The Registered Professional Engineer or Geologist shall be given full authority to oversee any earth moving activities that have the potential to disturb contaminated soil.

Verification: At least 30 days prior to the start of site mobilization, the project owner shall submit the qualifications and experience of the Registered Professional Engineer or Geologist to the CPM for approval.

CONTAMINATED SOIL EXCAVATION

WASTE-5: If potentially contaminated soil is unearthed during excavation at either the proposed site or linear facilities as evidenced by discoloration, odor, detection by handheld instruments, or other signs, the Registered Professional Engineer or Geologist shall inspect the site, determine the need for sampling to confirm the nature and extent of contamination, and file a written report to the project owner and CPM stating the recommended course of action. Depending on the nature and extent of contamination, the Registered Professional Engineer or Geologist shall have the authority to temporarily suspend construction activity at that location for the protection of workers or the public. If, in the opinion of the Registered Professional Engineer or Geologist, significant remediation may be required, the project owner shall contact representatives of ~~the LA County Department of Hazardous Materials,~~ the Los Angeles Regional Water Quality Control Board, ~~and~~ the Glendale Regional Office of the California Department of Toxic Substances Control the CPM, and other local agencies, if applicable, for guidance and possible oversight.

Verification: The project owner shall submit any reports filed by the Registered Professional Engineer or Geologist to the CPM and the City of El Segundo Fire Department within 5 days of their receipt. The project owner shall notify the CPM within 24 hours of any orders issued to halt construction.

REMEDIAL INVESTIGATION WORKPLAN

WASTE-6: Before demolition of either the fuel oil tanks or the existing generator buildings and any other building, respectively, the project owner shall prepare a Remedial Investigation Workplan (RI Workplan). This plan shall include a detailed site characterization plan with soil and groundwater sampling and analysis to determine the extent and nature of contamination existing beneath these structures. The RI Workplan shall be provided to ~~the Los Angeles County Fire Department,~~ the Glendale Regional Office of the California Department of Toxic Substances Control, the Los Angeles Regional Water Quality Control, and the City of El Segundo Fire Department, and other local agencies, if applicable, for review and comment, and to the CEC CPM for review and approval. If contaminated soil or groundwater is found to exist, the project owner shall contact representatives of the above-named agencies for further guidance and possible oversight. In no event shall the project owner proceed with site preparation or construction activities at any location on the site where hazardous waste contamination is found to be present until that location is either remediated or shown to pose an insignificant risk to humans and the environment as demonstrated to the satisfaction of the LARWQCB, DTSC, and the CPM.

Verification: At least sixty (60) days prior to commencement of fuel tank demolition or structure demolition, respectively, the project owner shall provide the RI Workplan to ~~the Los Angeles County Fire Department,~~ the Glendale Regional Office of the California Department of Toxic Substances Control, the Los Angeles Regional Water Quality Control Board, the City of El Segundo Fire Department, other agencies, if applicable, and the CEC CPM. Within thirty (30) days of completion of the sampling and analysis and prior to the initiation of any construction activities, the project owner shall provide the results of the sampling and analysis to ~~the Los Angeles County Fire Department,~~ the Glendale Regional Office of the California Department of Toxic Substances Control, the Los Angeles Regional Water Quality Control Board, the City of El Segundo Fire Department, other agencies, if applicable, and the CPM for review and guidance on possible remediation.

RUNOFF CONTAINMENT

WASTE-7 Before demolition of the fuel oil tanks, the existing generator buildings and any other building, the project owner shall ensure that the appropriate portion of the site is surrounded by a berm or other solid structures capable of containing any runoff from that portion of the site and preventing this runoff from leaving the site. In no event shall the project owner proceed with site preparation or construction activities at any location on the site where hazardous waste contamination is found to be present until that location has such containment in place to the satisfaction of the CPM.

Verification: At least thirty (30) days prior to commencement of site preparation activities, the project owner shall provide written plans on containment to the CPM for review and approval.

HAZARDOUS WASTE SURVEY

WASTE-8 Prior to modification or demolition of existing structures, the project owner shall complete and submit a survey of all Asbestos-Containing Materials (ACM) and Regulated Building Materials (RBM) that contain lead-based paint to the El Segundo Fire Department for review and comment and to the CPM for approval. After receiving approval, the project owner shall remove all ACM and RBM from the site prior to demolition.

Verification: No less than sixty (60) days prior to commencement of structure demolition, the project owner shall provide the survey to the El Segundo Fire Department for review and comment, and to the CPM for review and approval. The project owner shall inform the CPM, via the monthly compliance report, of the data when all ACM and RBM were removed from the site.

LAWS, ORDINANCES, REGULATIONS & STANDARDS

WASTE MANAGEMENT

APPLICABLE LAW	DESCRIPTION
<i>FEDERAL</i>	
42 U.S.C. §§6901-6992k, RCRA Subtitle C and D	Regulates non-hazardous and hazardous wastes. Laws implemented by the State.
40 CFR 260, et seq.	Implements regulations for RCRA Subtitle C and D. Implemented by the US EPA by delegating to the State.
Federal Clean Water Act, 33 U.S.C. §1251 et seq.	Regulates wastewater discharges to surface waters of the US. NPDES program administered at the State level.
<i>STATE</i>	
Public Resources Code §40000 et seq. (California Integrated Waste Management Act)	Implements RCRA regulations for non-hazardous waste.
Water Code §13000, et seq. (Porter-Cologne Water Quality Control Act)	Regulates wastewater discharges to surface and groundwater of California. NPDES program implemented by State Water Resources Control Board.
22 CCR §66262.34	Regulates accumulation periods for hazardous waste generators. Typically hazardous waste cannot be stored on-site for greater than 90 days.
Health & Safety Code §25100 et seq. (California Hazardous Waste Control Law)	Regulates hazardous waste handling/storing. Implemented by the San Bernardino Fire Department/City of Redlands <u>El Segundo</u> Fire Department, Hazardous Materials Division.
<i>LOCAL</i>	
City of El Segundo, General Plan & Municipal Code, Title 6, Chapter 6.22	Requires El Segundo Fire Department to administer hazardous waste management and disposal procedures.